

DOCUMENT RESUME

ED 123 451

CE 007 192

TITLE Maritime Education and Training. Hearings Before the Subcommittee on Merchant Marine of the Committee on Merchant Marine and Fisheries. House of Representatives. Ninety-Fourth Congress, First Session.

INSTITUTION Congress of the U.S., Washington, D.C. House Committee on Merchant Marine and Fisheries.

PUB DATE 76

NOTE 220p.; Not available in hard copy due to small type in original document

EDRS PRICE MF-\$0.83 Plus Postage. HC Not Available from EDRS.

DESCRIPTORS *Boatmen; *Educational Needs; Educational Programs; *Federal Legislation; *Seamen

IDENTIFIERS *Marine Occupations; *Merchant Marine

ABSTRACT

The hearings focus on H.R. 1626 and H.R. 9864 (bills to increase the subsistence payments to students at State maritime academies) and H.R. 10413 and H.R. 10500 (bills to amend the Merchant Marine Act of 1936 and the Maritime Academy Act of 1958 to provide for an integrated system of education and training of officers for the U.S. Merchant Marine and for other purposes). The report of the first hearing (27 pages) contains the full texts of statements from the Maritime Administration of the Department of Commerce and the Alumni Association of the U.S. Merchant Marine Academy and verbatim reports of the discussions following the statements. The report of the second hearing (67 pages) contains the full texts of statements from the Office of Merchant Marine Safety of the U.S. Coast Guard, and superintendents of State Maritime academies and verbatim reports of discussion. The report of the third hearing (118 pages) consists of the full texts of statements from, and discussion with, the Committee on Merchant Marine of the American Legion; National Council of the Maritime Academy Alumni Associations; the Maritime Transportation Research Board of the National Research Council/National Academy of Sciences; the International Organization of Masters, Mates, and Pilots; and the Marine Engineers Beneficial Association. (Author/EC)

* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *

ED123451

JUN 01 1976

MARITIME EDUCATION AND TRAINING

HEARINGS BEFORE THE SUBCOMMITTEE ON MERCHANT MARINE OF THE COMMITTEE ON MERCHANT MARINE AND FISHERIES HOUSE OF REPRESENTATIVES NINETY-FOURTH CONGRESS FIRST SESSION

ON

H.R. 1626 and H.R. 9864

BILLS TO INCREASE THE SUBSISTENCE PAYMENTS TO
STUDENTS AT STATE MARITIME ACADEMIES

H.R. 10413 and H.R. 10500

BILLS TO AMEND THE MERCHANT MARINE ACT, 1936, AND
THE MARITIME ACADEMY ACT OF 1958 TO PROVIDE FOR AN
INTEGRATED SYSTEM OF EDUCATION AND TRAINING OF
OFFICERS FOR THE UNITED STATES MERCHANT MARINE,
AND FOR OTHER PURPOSES

OCTOBER 30, DECEMBER 3, 9, 1975

Serial No. 94-22

Printed for the use of the Committee on Merchant Marine and Fisheries



U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1976

17-571

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

COMMITTEE ON MERCHANT MARINE AND FISHERIES

LEONOR K. (MRS. JOHN B.) SULLIVAN, Missouri, *Chairman*

THOMAS L. ASHLEY, Ohio
 JOHN D. DINGELL, Michigan
 THOMAS N. DOWNING, Virginia
 PAUL G. ROGERS, Florida
 JOHN M. MURPHY, New York
 WALTER B. JONES, North Carolina
 ROBERT L. LEGGETT, California
 MARIO BIAGGI, New York
 GLENN M. ANDERSON, California
 E. (KIKI) DE LA GARZA, Texas
 RALPH H. METCALFE, Illinois
 JOHN B. BREAUX, Louisiana
 FRED B. ROONEY, Pennsylvania
 PAUL S. SARBANES, Maryland
 BO GINN, Georgia
 GERRY E. STODDS, Massachusetts
 DAVID R. BOWEN, Mississippi
 JOSHUA EILBERG, Pennsylvania
 RON DE LUGO, Virgin Islands
 CARROLL HUBBARD, Jr., Kentucky
 DON BONKER, Washington
 LES AUCOIN, Oregon
 NORMAN E. D'AMOURS, New Hampshire
 JERRY M. PATTERSON, California
 LEO C. ZEFERETTI, New York
 JAMES L. OBERSTAR, Minnesota

PHILIP E. RUPPE, Michigan
 CHARLES A. MOSHER, Ohio
 PAUL N. McCLOSKEY, Jr., California
 GENE SNYDER, Kentucky
 EDWIN B. FORSYTHE, New Jersey
 PIERRE S. (PETE) DU PONT, Delaware
 DAVID C. TREEN, Louisiana
 JOEL PRITCHARD, Washington
 DON YOUNG, Alaska
 ROBERT E. BAUMAN, Maryland
 NORMAN F. LENT, New York
 MATTHEW J. RINALDO, New Jersey
 DAVID F. EMERY, Maine

ERNEST J. CORRADO, *Chief Counsel*

FRANCES STILL, *Chief Clerk*

RICHARD N. SHAROGG, *Chief Minority Counsel*

SUBCOMMITTEE ON MERCHANT MARINE

THOMAS N. DOWNING, Virginia, *Chairman*

THOMAS L. ASHLEY, Ohio
 JOHN D. DINGELL, Michigan
 GLENN M. ANDERSON, California
 FRED B. ROONEY, Pennsylvania
 PAUL S. SARBANES, Maryland
 BO GINN, Georgia
 JOSHUA EILBERG, Pennsylvania
 JERRY M. PATTERSON, California
 LEO C. ZEFERETTI, New York
 JAMES L. OBERSTAR, Minnesota
 MARIO BIAGGI, New York
 RON DE LUGO, Virgin Islands
 DON BONKER, Washington
 NORMAN E. D'AMOURS, New Hampshire
 WALTER B. JONES, North Carolina
 JOHN B. BREAUX, Louisiana
 RALPH H. METCALFE, Illinois
 JOHN M. MURPHY, New York

PAUL N. McCLOSKEY, Jr., California
 CHARLES A. MOSHER, Ohio
 PIERRE S. (PETE) DU PONT, Delaware
 GENE SNYDER, Kentucky
 DAVID C. TREEN, Louisiana
 JOEL PRITCHARD, Washington
 DON YOUNG, Alaska
 DAVID F. EMERY, Maine

PHILIP E. RUPPE, Michigan, *ex officio*

LEONOR K. SULLIVAN, Missouri, *ex officio*

LEN SUTTER, *Counsel*

MARY C. McDONNELL, *Counsel*

RONALD K. LOSCH, *Minority Counsel*

CONTENTS

	Page
Hearings held--	
October 30, 1975-----	1
December 3, 1975-----	29
December 9, 1975-----	97
Text of--	
H.R. 1626-----	1
H.R. 9864-----	1
H.R. 10413-----	2
H.R. 10500-----	2
Reports from--	
H.R. 1626:	
Defense (Navy) Department-----	1
Transportation Department-----	2
Statement of--	
Benkert, Rear Adm. William M., Chief, Office of Merchant Marine Safety, U.S. Coast Guard-----	29
Prepared statement-----	32
Calhoon, Jesse M., national president, Marine Engineers Beneficial Association-----	138
Curr, James, legislative counsel, International Organization of Masters, Mates & Pilots-----	122
Harrington, Rear Adm. Lee, president, Massachusetts Maritime Academy-----	49
Prepared statement-----	56
Horan, William, chairman, Committee on Merchant Marine, The American Legion, as presented by Michael Slee-----	97
Ingram, John G., national council, Maritime Academy Alumni Associations-----	99
Johnson, Capt. Gerald L., executive vice president, International Organization of Masters, Mates & Pilots, International Marine Division of ILA, AFL-CIO-----	122
Joyce, Comdr. Ben, Office of Merchant Marine Safety, U.S. Coast Guard-----	29
Kinney, Rear Adm. Sheldon, president, State University of New York Maritime College, appearing on behalf of the superintendents of the State maritime academies-----	49
Leeper, John H., Senior Project Manager, Maritime Transportation Research Board, National Research Council/National Academy of Sciences-----	110
Lord, Edward, National Legislative Division, The American Legion--	97
Marlow, Howard, Marine Engineers Beneficial Association-----	138
Nottingham, Milton G., Jr., legislative representative, alumni associa- tion, U.S. Merchant Marine Academy-----	16
Rector, George, director, Great Lakes Maritime Academy-----	49
Prepared statement-----	57
Rizza, Rear Adm. Joseph, superintendent, California Maritime Academy-----	49
Rodgers, Rear Adm. E. A., superintendent, Maine Maritime Acad- emy-----	49
Slee, Michael, director of the National Security Foreign Relations Division, the American Legion-----	97
Smith, Rear Adm. J. W., superintendent, Texas Maritime Academy--	60
State University of New York Maritime College (prepared)-----	59
Strichartz, Harvey, technical director, American Radio Association, AFL-CIO-----	196
Superintendents of the State Maritime Academies (prepared)-----	58

IV

Statements of—Continued	
Teague, Hon. Olin E., a Representative in Congress from the State of Texas	Page 194
U.S. Maritime Service Cadets of the State Maritime Academies (Cadet Schoenster 1/C, Cadet S. Miller 1/C, and Cadet L. Pettis 1 C)	170
Van Dorn, A. Reading, Jr., General Counsel, Maritime Administration, Department of Commerce	4
Additional material supplied by—	
American Legion: Resolution No. 432	98
Calhoon, Jesse M.:	
CG-722—Allotment notice	171
Interim report of employment of graduates, U.S. Merchant Marine Academy, State marine schools, graduates 1951-60, inclusive	139
MEBA Diagnostic Center case history	168
Press release of October 7, 1975: Cal Maritime Now Taking Applications	167
Sampling of background of 2,096 licensed officers	167
Tables appended to prepared statement	163
California Maritime Academy:	
Employment statistics	79
Supplemental questions for the record by Congressman Emery and replies	93
Response to Mrs. Sullivan's questions	78
Coast Guard: Item writers	38
Great Lakes Maritime Academy:	
Board of visitors	202
Response to Mrs. Sullivan's questions	80
Statement by Rear Adm. George B. Rector relating to the Academy's position statement on H.R. 10413	199
Leeper, John H.: Seamen's employment analysis, nationwide median ages	115
MEBA:	
Article—Hydrogen Fuel "Feasible" for Ships	205
Maine Maritime Academy:	
Agreement, District No. 1, Pacific Coast District, Tanker Vessels, 1972-75	90
Supplemental questions for the record by Congressman Emery and responses	82
Supplement response to queries by Mrs. Sullivan	74
Supplemental statement by Rear Admiral Rogers	85
Maritime Administration:	
Cost per graduate for the class of 1974	9
Questions submitted and answers thereto	10
Maritime Service Cadets:	
Engineering curriculum	210
Rebuttal of statement made by Jesse M. Calhoon	205
Massachusetts Maritime Academy:	
Response to Mrs. Sullivan's questions	70
Supplemental questions for the record by Congressman Emery and replies	92
State University of New York Maritime College: Answers to Mrs. Sullivan's questions	74
Texas Maritime Academy:	
Class of 1975, employers, union status	73
Employers of graduates and union status	72
Responses to Mrs. Sullivan's questions	71
Communications submitted for the record—	
Blohm, George H., letter of December 9, 1975, to Hon. Thomas N. Downing	198
Femenia, José, letter of December 29, 1975, to Hon. Thomas N. Downing with enclosure	202
Gooding, Rear Adm. R. C., letter of December 24, 1969, to J. M. Calhoon	171
Hall, Paul, letter of January 14, 1976, to Hon. Thomas N. Downing	199

Communications submitted for the record—Continued	Page
Luebke, Roy, memorandum of December 4, 1975, to Jesse M. Calhoun.....	171
Powers, Thomas W., letter of October 3, 1975, to Roy Luebke.....	148
Rector, Rear Adm. George B., letter of December 16, 1975, to Congressman Emery.....	81
Rizza, J. P., letter of December 2, 1975, to Hon. Thomas N. Downing with attachment.....	50
Siler, Adm. O. W., letter of March 8, 1976, to Hon. Leonor K. Sullivan.....	37
Singman, Julian H., letter of February 2, 1976, to Hon. Thomas N. Downing.....	126
Smith, Rear Adm. John W., letter of January 5, 1976, to Frances Still with responses to questions.....	71
Thor, Lt. Howard A.: Memorandum of November 17, 1970, to Rear Adm. F. T. Williamson on NLEBA discrimination against academy graduates.....	88
Memorandum to Rear Adm. F. T. Williamson on declining employment opportunities for academy graduates.....	85
Wilkins, Paul, Jr., letter of October 30, 1975, to Capt. Frank Scavo..	135

MARITIME EDUCATION AND TRAINING

THURSDAY, OCTOBER 30, 1975

HOUSE OF REPRESENTATIVES,
COMMITTEE ON MERCHANT MARINE AND FISHERIES,
SUBCOMMITTEE ON MERCHANT MARINE,
Washington, D.C.

The subcommittee met at 10:10 a.m., in room 1334, Longworth House Office Building, Hon. Thomas N. Downing (subcommittee chairman) presiding.

Mr. DOWNING. The subcommittee will please come to order.

We are meeting this morning to begin hearings on a number of bills pertaining to the education and training of officers of the U.S. Merchant Marine.

Two of the bills we are considering this morning, H.R. 9864 and H.R. 1626 is to increase the allowance for students in the State maritime academies from \$600 to \$1,200.

Together with several of the other members of the subcommittee, I have cosponsored with Mrs. Sullivan, chairman of the full committee, H.R. 10413. This bill is designed to implement the conclusions and recommendations of the Ad Hoc Committee on Maritime Education and Training.

Mrs. Sullivan's more comprehensive bill contains a provision identical to that of the other two bills before the subcommittee this morning but also addresses a number of other issues such as developing a systematic method of prospective planning of the numerical requirements of our future officers, retaining of officers serving aboard our ships and identifying the personnel in this country which may be needed in the event of a national emergency.

The bills and departmental reports will appear in the record at this point.

[The material follows:]

[H.R. 1626 and H.R. 9864, 94th Cong., 1st sess.]

BILLS To increase the subsistence payments to students at State maritime academies

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That section 6(a) of the Maritime Academy Act of 1958, as amended (46 U.S.C. 1385(a)), is amended by striking "\$600", and inserting lieu thereof "\$1,200".

DEPARTMENT OF THE NAVY.
OFFICE OF LEGISLATIVE AFFAIRS.
Washington, D.C., October 31, 1975.

HON. LEONOR K. SULLIVAN,
Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives,
Washington, D.C.

DEAR MADAM CHAIRMAN: Your request for comment on H.R. 1626, a bill "To increase the subsistence payments to students at the State maritime academies,"

(1)

has been assigned to this Department by the Secretary of Defense for the preparation of a report thereon expressing the views of the Department of Defense.

This bill would amend section 6(a) of the Maritime Academy Act of 1958 by increasing the maximum subsistence payments to students at State maritime schools to \$1200 vice \$600.

The Department of the Navy, on behalf of the Department of Defense, defers to the views of the Department of Commerce on H.R. 1626.

Enactment of this legislation would not result in any additional expenditures by the Department of Defense.

This report has been coordinated within the Department of Defense in accordance with procedures prescribed by the Secretary of Defense.

The Office of Management and Budget advises that, from the standpoint of the Administration's program, there is no objection to the presentation of this report for the consideration of the Committee.

For the Secretary of the Navy.

Sincerely yours,

T. F. HAIRSTON,
Captain, JAGC, U.S. Navy.
Director, Legislation.

OFFICE OF THE SECRETARY OF TRANSPORTATION,
Washington, D.C., October 29, 1975.

HON. LEONOR K. SULLIVAN,
Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives,
Washington, D.C.

DEAR MADAM CHAIRMAN: Reference is made to your request for the views of the Department of Transportation concerning H.R. 1626, a bill "To increase the subsistence payments to students at State maritime academies."

The bill would increase, from \$600 to \$1200 per student, per academic year, the subsidy paid to academies and colleges with which the Secretary of Commerce contracts under the authority of the Maritime Academy Program (46 U.S.C. 1381-1388). The bill has no direct impact on this Department. Accordingly, we defer to the Department of Commerce as to the need for this legislation.

The Office of Management and Budget advises that, from the standpoint of the Administration's program, there is no objection to the submission of this report for the consideration of the Committee.

Sincerely,

JOHN HART ELY.

[H.R. 10500 and H.R. 10413, 94th Cong., 1st sess.]

BILLS To amend the Merchant Marine Act, 1936, and the Maritime Academy Act of 1958 to provide for an integrated system of education and training of officers for the United States Merchant Marine, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Maritime Education and Training Act of 1975".

SEC. 2. It is the intention of Congress that the United States Merchant Marine Academy, the State maritime academies, and other institutions which educate and train individuals for initial licensing as officers of the United States Merchant Marine should continue to perform this function, and that sufficient flexibility to fulfill short-term emergency requirements for such officers should be maintained by schools other than the United States Merchant Marine Academy and the State maritime academies.

SEC. 3. (a) The Merchant Marine Act, 1936 (46 U.S.C. 1101 et seq.) is amended—

(1) by adding at the end of section 209 (46 U.S.C. 1119) thereof the following:

"(c)(1) In order that accurate information is available for determining authorizations to carry out subsection (b)(1)(6) of this section, before the beginning of each fiscal year the Secretary of Commerce shall meet with representatives of the United States Merchant Marine Academy, the State maritime academies, and any other institution which trains individuals for initial licensing as officers in the United States Merchant Marine, for the purpose of estimating

the projected enrollment at all such institutions during such fiscal year and the next three fiscal years.

"(2) Not later than eight months before the beginning of each fiscal year, the Secretary shall submit a report to Congress which sets forth the enrollment estimates for such fiscal year and the next three fiscal years made by him pursuant to paragraph (1) of this subsection together with projections (prepared by him on the basis of the best information available) of the needs of the United States Merchant Marine for officers during the four-fiscal year periods for which such enrollment estimates are made."; and

(2) by inserting immediately after the first sentence in section 216(b) (1) (46 U.S.C. 1126(b)(1)) thereof the following: "The number of persons initially appointed to the Academy for any one year may not exceed the authorized number of initial appointments for that year established by law.".

(b) The amendment made by paragraph (2) of subsection (a) shall apply with respect to appointments made to the United States Merchant Marine Academy for the academic year 1976-1977 and academic years thereafter.

Sec. 4. The Maritime Academy Act of 1958 (46 U.S.C. 1381-1388) is amended—

(1) by striking out "and (5)" in section 3(a) and inserting in lieu thereof

"(5) shall be manned in accordance with such standards as shall be prescribed by the Commandant of the Coast Guard, and (6)";

(2) by striking out "\$600" in section 6(a) and inserting in lieu thereof "\$1,200"; and

(3) by adding at the end of section 6 (46 U.S.C. 1385) the following:

"(c) If the amount of funds, authorized and appropriated by the Congress for use in accordance with the provisions of this section, in any fiscal year is not sufficient to provide payments to all students eligible under subsection (a), then the Secretary shall apportion the authorized and appropriated funds among the academies and colleges with which he contracted under section 4 of this Act in direct proportion to the total enrollment of each such academy or college at the end of the 1975 academic year.".

Sec. 5. Before the close of the six-month period beginning on the date of the enactment of this Act, the Secretary of Commerce shall submit to Congress his recommendations with respect to appropriate ways and means by which the resources and programs of the National Maritime Research Center may be made available to students at the United States Merchant Marine Academy, the State maritime academies, and any other institutions which train individuals for initial licensing as officers in the United States Merchant Marine.

Sec. 6. The Secretary of the Department in which the Coast Guard is operating shall take such action as may be necessary and appropriate to compile, and thereafter keep current, a roster of the names and addresses of all individuals who have not attained the age of sixty-five years and who are, or at any time were, licensed as officers in the United States Merchant Marine in order that the location of such individuals be readily available in the event of any national emergency. The Secretary shall prepare a report on the manner in which this section is implemented during the one-year period beginning on the date of the enactment of this Act and shall submit such report to Congress within thirty days after the close of such one-year period.

Sec. 7. The Secretary of Commerce and the Secretary of the Department in which the Coast Guard is operating shall jointly undertake a thorough review of the laws, regulations, and policies which pertain to the renewal of the licenses of merchant marine officers to determine if existing renewal procedures provide for the adequate testing of officers' retention of basic skills as well as their knowledge of current maritime technology, regulations, and procedures. A joint report on the study required by this section shall be submitted to Congress by the Secretaries before the close of the six-month period beginning on the date of the enactment of this Act, and if the Secretaries find that existing renewal procedures are inadequate, the report may include such recommendations, including proposed legislation, as the Secretaries deem necessary and appropriate.

Mr. DOWNING. Our first witness this morning is Mr. A. Reading Van Dorn, Jr., General Counsel of the Maritime Administration, Department of Commerce.

Mr. Van Dorn, you may proceed as you wish.

STATEMENT OF A. READING VAN DORN, JR., GENERAL COUNSEL,
MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

Mr. VAN DORN. Thank you, Mr. Chairman.

Mr. Chairman and members of the subcommittee: My name is A. Reading Van Dorn, Jr., General Counsel of the Maritime Administration. I appreciate this opportunity to appear before you today on behalf of the Maritime Administration and testify on H.R. 1626, a bill to amend the Maritime Academy Act of 1958, to increase the student subsistence payment from \$600 to \$1,200 per year at the State maritime academies. I have also been asked to provide you with the Maritime Administration's views on H.R. 10413, a bill introduced by Chairman Sullivan, which I understand is designed to implement the conclusions and recommendations of the report of the ad hoc committee on maritime education and training. The Maritime Administration supports the conclusions contained in that report.

It is the stated policy of the United States to have a merchant fleet "composed of the best equipped, safest, and most suitable types of vessels, constructed in the United States and manned with a trained and efficient citizen personnel. . . ." In furtherance of this stated policy, the Maritime Academy Act of 1958 was enacted to assist the States and territories in the operation and maintenance of maritime academies or colleges for the training of merchant marine officers.

With the increasing complexity of vessels constructed since 1958 and the concomitant increased requirements for technical knowledge, the need for highly trained officers to prevent loss of life and damage to property and the environment has been accentuated. State maritime academies and colleges have been, and continue to be, a primary source of these trained officers.

Under the Maritime Academy Act of 1958, subsistence allowances for cadets at the State academies and colleges provide for payments at a rate not in excess of \$600 per academic year per student. Payments to the schools were based on a per diem rate for each day of attendance—roughly \$50 a month per student. These payments are used to defray the cost of uniforms, books, and subsistence and may be made to the academy or college, or directly to each student, as the Secretary of Commerce deems advisable. In practice, these payments have always been made to the academy or college on behalf of each named student.

The increased amount of subsistence proposed would not significantly affect the total number of subsidized officers that would be graduated from the schools. Each of the State maritime schools currently has a freshman subsidy ceiling which would still be in effect. This ceiling is based on the size of the freshman class that entered the schools in the fall of 1964 and is designed to tailor Federal support to the peacetime needs of the industry for merchant marine officers.

As of September 30, 1975, there were 2,695 students enrolled at the six State maritime academies or colleges: California Maritime Academy, Vallejo, Calif.; Great Lakes Maritime Academy, Traverse City, Mich.; Maine Maritime Academy, Castine, Maine; Massachusetts Maritime Academy, Buzzards Bay, Mass.; State University of New York Maritime College, Fort Schuyler, N.Y.; and Texas Mari-

time Academy of Texas A. & M. University, Galveston, Tex. Of these 2,695 students, 1,805 receive Federal subsistence payments under the Maritime Academy Act of \$600 per year. The 890 students not receiving payments include foreign students, students on leave of absence without pay, NROTC students, students in excess of ceilings, and special students.

Enactment of H.R. 1626 would increase the cost of Federal financial assistance to the State maritime schools by approximately \$1.2 million per year. In view of the current need for budget restraint, the Department of Commerce opposes enactment of H.R. 1626.

H.R. 10413, introduced by Chairman Sullivan, contains a number of provisions designed to coordinate the education and training of officers for the U.S. merchant marine. Currently, there are three sources of such officers: the U.S. Merchant Marine Academy at Kings Point, the six State maritime academies, and the industry schools, such as the Calhoun Marine Engineers' Beneficial Association School in Baltimore, Md. The need for such coordination is caused by the cyclical nature of the maritime industry.

The Maritime Administration supports the statement of congressional intent set forth in section 2 of the bill that Kings Point, the State marine academies, and other institutions which educate and train individuals for initial licensing as merchant marine officers should continue to perform this function. We also support the statement to the effect that the industry schools are more able to fulfill the short-term emergency requirements for licensed merchant marine officers than are Kings Point and the State maritime academies. We endorse this view because the industry schools have more flexible response time than the State academies or Kings Point and can produce new officers on short notice and in large numbers, particularly through the upgrading of unlicensed seamen.

Everyone recognizes that the Federal Government should not be encouraging young men and women to pursue a career where there may be insufficient employment opportunities. I question, however, the need to mandate meetings between the Secretary of Commerce and the representatives of Kings Point, the State academies, and the industry schools to estimate enrollment at such institutions for 4 fiscal years. Currently, meetings between the Maritime Administration and representatives of Kings Point and the State academies occur at least yearly. We recommend that this cooperation and coordination continue on an informal voluntary basis.

As to the requirement in section 3 of the bill for the Maritime Administration to submit a report to the Congress on enrollment estimates at Kings Point, the State maritime schools, and the industry schools "not later than 8 months before the beginning of each fiscal year," I again question the wisdom of mandating such a requirement. You may be assured that the Agency would be more than happy to honor any appropriate request from the Congress for such information at any time of the year. Further, we note that as the bill is drafted the enrollment estimates at the various institutions relate to the needs of the merchant marine for licensed officers for that fiscal year. We believe such estimates should relate to the year in which the class would graduate. These forecasts are speculative at best because of the many variables involved, particularly student attrition rates.

The language contained in section 3(a)(2) of the bill amending section 216(b)(1) of the Merchant Marine Act of 1936 is unclear. Accordingly, I am unable to comment on it.

Section 4(1) of the bill would require that training ships made available by the Secretary of Commerce to State academies under the Maritime Academy Act of 1958 be "manned in accordance" with Coast Guard standards. The Maritime Administration supports the safe and efficient operation of vessels. However, I believe such a requirement may be unnecessary because the Coast Guard under existing law has the authority to promulgate minimum manning standards on schoolships. In this regard, I direct the subcommittee's attention to the notice of proposed rulemaking in the January 21, 1975, edition of the Federal Register. In that notice, the Coast Guard proposed that, notwithstanding whether or not a vessel is documented, the minimum number of officers and crew necessary for the safe navigation of all manned vessels should be stated in the certificate of inspection. The proposed rule also would permit students on schoolships to perform required watchstanding duties when they are considered qualified to do so by the master of the vessel.

We also cannot support section 4(3) of the bill. As you know, we have instituted freshman subsidy ceilings as part of our overall effort to control the number of graduates. This provision would in effect nullify the freshman subsidy ceilings by apportioning available funds among all eligible students. Further, the proposed method of apportioning insufficient funds would pose considerable administrative difficulties. Not only would eligible students receive less than \$1,200 per year but also that the rate of pay will vary from school to school as attrition varies because once funds are apportioned to a school they could not be reapportioned. Accordingly, the rate of pay at a given school will vary with the degree of attrition.

Section 5 of the bill would require the Secretary of Commerce to submit to Congress his recommendations with respect to appropriate ways by which the resources and programs of the National Maritime Research Center may be made available to students at Kings Point, the State maritime academies, and any other institutions which train individuals for initial licensing as merchant marine officers. It should be pointed out that the NMRC is primarily a research facility. It does provide opportunities for participation in research to a limited number of Kings Point cadets. We believe that such opportunities should be and can be shared with top scholars from the other institutions.

Under section 6 of the bill the Coast Guard would be required to compile a roster of the names and addresses of licensed officers so that such officers may be located in the event of any national emergency. The Maritime Administration lends its wholehearted support to such an endeavor. In answering as to whether the Coast Guard can in fact design such a program, I defer to that Agency.

Finally, the bill would require the Secretary of Commerce and the Coast Guard to undertake a thorough review of the laws, regulations, and policies governing the renewal of merchant marine officers' licenses to determine if existing renewal procedures provide for the adequate testing of officers' retention of skills and knowledge of current maritime technology. We believe that the safety and efficiency of ship operations dictate that officers have a demonstrative knowledge of or train-

ing in advanced maritime technology, for example, collision avoidance, radar, and firefighting. The Maritime Administration endorses such a review.

This concludes my statement. I shall be happy to answer any questions the subcommittee may have.

Mr. DOWNING. Thank you very much, Mr. Van Dorn.

I see from your testimony that because of the need for budget restraint, the Department of Commerce opposes the increase in funds for those students in State schools from \$600 to \$1,200.

What was and is the opinion of the Maritime Administration on this increase in subsistence payments for cadets in State schools?

Mr. VAN DORN. The Maritime Administration recognizes there has been an impact of inflation since 1958 and certainly the \$600 that was set as a ceiling in 1958 no longer has the buying power today that it had then. It is our feeling that if the Congress wants to maintain that level of spending power they are going to have to increase the \$600 to a higher figure. But there are other priorities and our feeling is that the budget comes first and we have to abide by that decision.

Mr. DOWNING. You do not think we can transfer some of the funds from the construction subsidy, which is apparently not going to be completely utilized, over to the State academies?

Mr. VAN DORN. I think that would be unwise. Of course, we certainly have hopes that we could see an increase in the construction of vessels in the United States. And, I think you are also going to see some cuts by OMB which will reduce the amount of money available for the construction differential subsidy program.

Mr. DOWNING. I have further questions but for the time being I will yield to the gentleman from New York, Mr. Biaggi, who is most experienced in this field and at whose insistence these hearings are being held.

I yield to Mr. Biaggi from New York.

Mr. Biaggi. Thank you, Mr. Chairman.

I am glad that you are for increasing the subsidy but restrained from supporting this bill because of budgetary difficulties.

As I understand it, the sums involved are \$1.2 million which is certainly not a significant sum as far as the total Federal budget is concerned; but most substantial as far as the individual student budget is concerned.

I would like to apprise you of just what is happening to the student at the State maritime academies. To begin with, education costs them \$10,000 to \$12,000. Most of the students come from middle income and low to middle income families. They have to struggle. They have the lower picture in the national economy. So by increasing the \$600 to \$1,200 you would over a 4-year period just provide \$2,400 per student which would then reduce the financial obligation of that individual's family to about \$10,000 a year.

I would like to ask you, what does it cost the Federal Government to graduate an applicant from a Federal academy?

Mr. VAN DORN. We have estimated that the cost of educating a cadet from the Merchant Marine Academy is approximately \$37,000. I might also add that based on the cost per cadet this figure is the lowest of any of Federal military academies.

Mr. Biaggi. Would you pull that microphone closer?

Mr. VAN DORN. I am sorry.

Mr. BLAGG. We should recognize that there are some of those here who may not have heard you, but there is the reporter there.

It is less than the military academies. What does it cost the Federal Government to put a student through the industry schools?

Mr. VAN DORN. I do not have an estimate on that figure. We pay operating differential subsidy to the subsidized shipping lines and they in turn pay a portion of that into the training fund used by the industry schools. I offhand do not have the figures.

Mr. BLAGG. Can you give us a guesstimate?

Mr. VAN DORN. I am sorry. We evidently do not get reports on what they cost.

Mr. BLAGG. It is fair to say it is essentially more than \$600 per year?

Mr. VAN DORN. I think that is a fair statement.

Mr. BLAGG. In light of that would you agree that the graduates of State schools are a valuable resource?

Mr. VAN DORN. Clearly.

Mr. BLAGG. Without belaboring the subject I think the merits of the issue are very clearly defined. I think the Department of Commerce takes a poor position in trying to effect economies in this particular area and I would suggest very strongly that you again evaluate the priorities and alternatives. It is an undeniably meritorious position but the question is, in light of the total budget, is \$1.2 million such a significant figure that we can justify continuing to deny an increase in subsistence allowance to students at the State academies—students who have not had an increase since 1959. In my judgment that is unconscionable.

Mr. DOWNING. Mr. Eilberg.

Mr. EILBERG. I would like to associate myself with the remarks of my colleague from New York. I also understand from the testimony that the Department of Commerce will not resist us too much.

Mr. DOWNING. Mr. de Lugo.

Mr. DE LUGO. Thank you very much, Mr. Chairman.

I also would like to commend the gentleman from New York for his remarks and to associate myself with them.

I would also like to direct this question again to the witness, Mr. Van Dorn because I would like to get it straight from the record.

I believe you said that it costs the Federal Government something like \$35,000 to graduate a student from a military academy?

Mr. VAN DORN. Yes; from Kings Point.

Mr. DE LUGO. Kings Point.

Mr. VAN DORN. The Merchant Marine Academy at Kings Point.

Mr. DE LUGO. That is the most economic? What is the highest that it costs the Federal Government for the military academies?

Mr. VAN DORN. I do not have those figures.

Mr. DE LUGO. I would like to request that, with no objection, at this point they be supplied for the record.

Mr. DOWNING. Could the witness supply those for the record?

Mr. VAN DORN. Yes.

Mr. DOWNING. Without objection they will be supplied for the record.

[The information follows:]

<i>Cost per graduate for the class of 1974</i>	
Academy :	Cost
Military -----	\$97, 200
Air Force -----	97, 000
Naval -----	70, 000
Coast Guard -----	60, 200
Merchant Marine -----	37, 000

Mr. DOWNING. The chief counsel, Mr. Corrado, has a question.

Mr. CORRADO. You say in your testimony that section 3(a) (2) is unclear. It amends 216(b) (1) which states that the Secretary of Commerce shall submit a report to Congress which sets forth the enrollment estimates for each fiscal year and the next 3 fiscal years and then the language in the bill adds: "The number of persons initially appointed to the Academy for any 1 year may not exceed the authorized number of initial appointments for that year established by law." I do not see what is so unclear about that.

Mr. VAN DORN. Our problem was with the language " * * * not exceed the authorized number of initial appointments for that year established by law." Let me take a look at section 216 of the act again. I do not think that section 216 has a provision authorizing the number of initial appointments. We were not entirely certain what the committee had in mind.

Mr. CORRADO. What it has in mind is you cannot exceed the level set by law, which would most probably be in the maritime authorization bill. As I understand, it has happened before, that is, that Kings Point has admitted more students than expected.

Mr. VAN DORN. It sounds as though the Secretary has discretion.

Mr. CORRADO. Well, rather than come up here and say that you cannot comment on a section of the bill because it is allegedly unclear, why did you not call me and talk to me about it? I do not concede it is unclear. I think it is abundantly clear and if you did have a problem with it I cannot understand why you did not call me.

Mr. VAN DORN. I think that would be a proper procedure.

Mr. CORRADO. I think so. And I think the language of the provision is clear.

Thank you, Mr. Chairman.

Mr. DOWNING. Mr. Van Dorn, with respect to your statement on the bottom of page 5 in which you question the wisdom of mandating meetings of all institutions in this country for estimating enrollment at such institutions for 4 fiscal years for officers for the U.S. Merchant Marine, I am sure you recognize that the system of voluntary cooperation this has been pursued by the Maritime Administration in the past and has proven to be somewhat less than satisfactory. If you do not think these meetings would improve the situation, what do you think should be done to establish the kind of cooperation among all institutions which is necessary to achieve the goals of all maritime in the country?

Mr. VAN DORN. Well, that is a somewhat difficult question. I was thinking of a negative approach. We felt this was not necessary. We have had meetings in the past. The latest meeting was in November of 1973. We did not have a meeting last year, but we are

planning one on November 20 of this year. At those meetings there is clearly a discussion of enrollment and there is a certain amount of give and take whether or not the Maritime Administration would permit the State academies to increase the subsidies ceiling. We have resisted an increase in every case. In other words, the Maritime Administration does not encourage an increase in the number of students accepted by the State academies. The State academies have a fiscal plan and they would like to see that plan supported by a good-sized student body. On the other side you have the problem of economics and there are not that many jobs in the maritime industry. I mean, you do not want to encourage people to go to school if, in fact, when they graduate there is not a job available for them.

Mr. DOWNING. You do not include meetings with industry schools?

Mr. VAN DORN. No. There are many schools, many of which have as their purpose the upgrading of union members.

Mr. DOWNING. What sort of rapport does the Department have with the MEBA school?

Mr. VAN DORN. I do not know about the MEBA school, but certainly we have contact with the MEBA union representatives.

Mr. DOWNING. To sum up your statement in a nutshell you agree that the increase to \$1,200 would be desirable but due to budgetary restraints you think that would not be right?

Mr. VAN DORN. I think that is our position.

Mr. DOWNING. Thank you, Mr. Van Dorn, for coming this morning.

Mr. VAN DORN. Thank you.

[The following questions were submitted to MARAD and the answers supplied thereto follow:]

Question 1. The Maritime Administration has been somewhat critical of the state maritime academies in the past because of what has been called reckless expansion in enrollments. I would like a comparative view of the expansion of the Federal maritime academy and the industry schools. It occurs to me that after the Vietnam emergency, the industry schools have continued to expand using Federal money albeit indirectly in some instances, but Federal money nonetheless. At the same time, state schools, financed by their individual state governments, have not made such a demand on the Federal treasury. As a similar point, I would like you to compare the amounts of Federal monies used to expand the physical plants at the U.S. Merchant Marine Academy, the union schools and the state maritime academies.

Answer. Based on information furnished us by the Federal and State academies we have compared their freshman enrollment below. We have requested comparable information from the industry officer training schools, but have received no information to date.

GROSS FRESHMAN ENROLLMENTS, 1966-75

Year	State maritime academies ¹	U.S. Merchant Marine Academy
1966.....	673	339
1967.....	693	339
1968.....	652	340
1969.....	668	340
1970.....	708	347
1971.....	760	349
1972.....	712	345
1973.....	752	344
1974.....	903	349
1975.....	1,052	354

¹ Includes subsidized, nonsubsidized, NROTC and foreign students.

While we have a modernization program at the U.S. Merchant Marine Academy for improvement and minimal expansion of existing facilities, the modernization projects are not occasioned by expanded enrollment but to improve existing facilities. As you can see from the foregoing table, the enrollment at the Academy has remained fairly constant. The modernization program will simply bring the 30-year old facilities up to adequate standards of heating, lighting, ventilation, and safety requirements.

The only element of plant expansion at the Academy since institutional buildings were completed in the early 1940's was construction of a library at a cost of \$963,150 in 1965 with \$100,974 provided in 1967 for fixtures and furnishings. No further major improvements were made to the existing structures until 1973 when a progressive program was begun to repair and upgrade facilities. Approximately \$2.7 million in Federal funds has been expended to upgrade the inadequate and potentially hazardous electrical distribution system, to renovate one academic building to provide more efficient and effective classroom space, and provide some rehabilitation of the existing barracks. In addition, construction has begun to furnish locker and dressing room facilities under the bleachers at Tomb Field (the Academy stadium), and to provide restrooms for the public at a total Federal cost of \$415,000. A medium sized lecture hall was constructed in Samuels Hall as part of the reallocation of Academy space to provide for the National Maritime Research Center. However, this facility does not constitute an overall increase in classroom space and the auditorium will be used jointly by the Academy and the research center. The current year appropriation for the Academy includes funds for construction of an addition to O'Hara Hall (the Academy gymnasium) to replace the existing inadequate swimming pool and provide space for other physical training activity at an estimated cost of approximately \$3.6 million. Correction of substandard physical fitness facilities was recommended by the Congressional Board of Visitors and the Middle States academic accrediting committee.

Each of the State Academies, with the exception of the Great Lakes Maritime Academy in fiscal year 1970, received a grant of \$75,000 each year for their maintenance and support. The Great Lakes Maritime Academy commenced operating in January 1970 and only received \$37,500 in fiscal year 1970. In light of the fact that these are grants that go into a general fund and are commingled with State funds we are not in a position to say what portion, if any, of the grants were used for physical plant expansion. We have not been furnished with figures on expenditures for physical plant expansion at the industry schools.

Question 2. How does the MARAD explain a recent situation in which the Shah of Iran footed the fuel bill for an annual cruise of a state maritime academy training ship? Does it not seem a bit unfortunate that the state maritime schools find themselves in such serious financial plight that they must look to a foreign nation in order to complete required training program for students? Should not MARAD be supporting such high cost items as fuel to avoid dependence on other governments in the future?

On this very same subject of training cruises, what concrete steps are being taken in light of the imminent replacement of state academy training vessels which are already at an advanced age? It has been traditional to palm off already old vessels, as they become available out of the reserve fleet, onto the academies for use as training vessels. Is it not incongruous to train future officers on relics out of the past? What future support, vesselwise, can the schools expect?

Is it not feasible at this time of slackening in shipyard work and tanker construction cutbacks to possibly use the money from CDS to produce new training vessels and, at the same time, keep up work and employment levels in shipyards that may have been hurt by construction cutbacks?

Answer. The situation in which Iran assisted the Maine Maritime Academy in obtaining fuel oil for the training vessel *State of Maine* was a special arrangement. We understand that the school admitted a number of Iranian students without an increase in the normal tuition for out-of-state students which reflects a considerable state subsidy, and Iran reciprocated by assisting in the acquisition of fuel. The attendance of Iranian students at several of the State Maritime Academies over the past few years has been in cooperation with the Department of State and the Department of Defense. The existing statute (Maritime Academy Act of 1958; P.L. 85-672) does not provide authority to assist in this area. Nor do we believe such assistance is desirable in a period in which the Federal budget is under constraint. If the MARAD were to provide assistance to all "high cost" items at the state schools, it would raise real questions

as to whether the schools should be state operated or Federally operated. We believe the schools should continue to be the responsibility of the States and the costs should be borne by the States.

With regard to the schoolships, we wish to advise that we share your view that our future merchant marine officers should be trained aboard more modern training vessels. We are currently in the process of studying the feasibility of constructing two new training vessels. At a recent meeting with the Superintendents of the State Academies, we requested them to submit their views on possible features and characteristics for such vessels. In determining whether to proceed with this matter we will of course have to be guided by statutory authority and Presidential budget guidelines.

We have no legal authority to use CDS funds to construct training vessels. The CDS appropriation can be used only to pay construction-differential subsidy and cost of national defense features for the construction or reconstruction of vessels to be operated in foreign commerce. We might also add that it would be very expensive to use CDS to purchase new ships for the schools and we do not believe that either the state schools or the Federal Government would wish to undertake commitments of this type.

Question 3(a). Please provide a breakdown of the MARAD subsidies to the state schools, the Federal academy, and to the union schools supported directly or indirectly by Federal funds on an annual basis since 1950. I believe this will show the illogical position the Administration is in by giving little or no support and even decreasing support in some areas of maritime training. It should be obvious that the state schools produce the most graduates for the least cost to the Federal government.

Answer. We have listed below the annual Federal appropriations for the State Maritime Academies and the U.S. Merchant Marine Academy since 1950. With regard to payment of subsidy on the training contributions made by the subsidized steamship companies, these contributions by the companies were disallowed for subsidy purposes through fiscal year 1974. On June 19, 1974, the U.S. Court of Claims issued an opinion (*Farrell Lines, Incorporated v. United States*; Ct. Cl. No. 42-72) finding that these training expenses were eligible for operating differential subsidy. The final outcome of the Court's decision and remand to the Maritime Subsidy Board has been payments totalling \$26,724,395 to the subsidized lines for their claims for subsidy on their training contributions during a portion of fiscal year 1972 and all prior years to 1960. Training contributions by the subsidized steamship companies are now included in eligible costs for calculation of operating differential subsidy. The resulting subsidy cost estimates are shown in the following table, together with the annual Federal appropriations for the State Academies and the U.S. Merchant Marine Academy since 1950:

Fiscal year	State maritime academies	U.S. Merchant Marine Academy	Union schools
1950	\$370,000	2,463,000	
1951	1,102,050	4,348,520	
1952	683,000	3,724,500	
1953	663,000	3,534,000	
1954	890,000	3,480,000	
1955	660,000	2,200,000	
1956	660,000	2,085,000	
1957	660,000	2,200,000	
1958	660,000	2,394,300	
1959	660,000	2,462,000	
1960	1,110,000	2,900,000	
1961	1,270,000	3,216,000	
1962	1,270,000	3,218,000	
1963	1,375,000	3,319,000	
1964	1,405,000	3,495,000	
1965	1,725,000	4,517,000	
1966	1,600,000	3,988,000	
1967	1,635,000	4,558,900	
1968	1,775,000	4,720,000	
1969	2,110,000	5,277,000	
1970	2,235,000	6,459,287	
1971	2,430,000	7,080,000	126,724,395
1972	2,200,000	7,602,000	2,289,662
1973	2,290,000	7,854,000	3,284,558
1974	2,427,000	8,893,000	3,421,640
1975	2,973,000	10,703,000	3,726,900

¹ See explanation in text.

Question 3(b). In addition to this, what is the projected budget for future years at the Federal Merchant Marine Academy? How does this budget projection, when broken down on a per student basis, compare with the \$35-37 thousand figure in your testimony? Also, how does it compare with Federal per student costs at the other schools?

Answer. The projected financial program level for the U. S. Merchant Marine Academy is expected to follow the basic financial plan for 1976 which included \$8,820,000 for the operating budget and \$3,980,000 or less for the modernization program. The operating budget is expected to increase over the years in the same degree as the cost of procuring goods and services increases. Accordingly, the extent to which the estimate of \$37,000 per graduate will increase will also depend on the degree of inflation. At the State Academies the estimated Federal cost per graduate varies from school to school ranging from \$5,000 to \$14,000 per graduate. These costs will of course also increase in the same degree as inflation increases the cost for maintenance and repair of the schoolships. With regard to the union schools, we must advise that we do not have sufficient information available to compute the estimated Federal cost per graduate.

Question 4. In light of the mounting Federal costs, please supply me the legal justification and the background of how the Federal government has involved itself in the supplying of men to work in a private industry.

Answer. The legal justification for the training of merchant marine officers at the U. S. Merchant Marine Academy resides in the Merchant Marine Act of 1936, as amended. Section 216(b) (1) of the Act states in part that "The Secretary of Commerce shall maintain a Merchant Marine Academy at Kings Point, New York, for the instruction and preparation for service in the merchant marine of selected persons as officers thereof." With regard to the State Maritime Academies, the legal justification resides in the Maritime Academy Act of 1958 (P. L. 85-672). Section 2 of that Act states that "It is hereby declared to be the policy of this Act to promote the national policy with respect to the United States Merchant Marine, as set out in section 101 of the Merchant Marine Act, 1936, by assisting and cooperating with the States and Territories in the operation and maintenance of maritime academies or colleges for the training of merchant marine officers."

It should also be noted that during World War II and several years following, the Federal Government also operated a number of U. S. Maritime Service Training Stations at Fort Trumbull, Connecticut; Sheepshead Bay, New York; St. Petersburg, Florida; etc. for the training of licensed and unlicensed personnel. The U. S. Maritime Service was a voluntary training organization established under the provisions of Section 216(a) of the Merchant Marine Act of 1936. The last of the USMS Training Stations was phased out in 1954.

Question 5. I believe it would be very helpful if an accurate breakdown of funds paid by subsidized companies to the unions for maintenance of their schools showing what portion of this money is actually part of their Federal operating subsidy. The point I am trying to bring out is that union schools are being subsidized by the Federal government to a great extent and are still practicing somewhat discriminatory hiring practices against graduates of other schools.

Answer. We have listed below our estimates of funds paid in fiscal year 1975 to the various maritime unions for training purposes by subsidized companies based on the ships which they operate under an Operating Differential Subsidy Contract. Additional payments are made by subsidized companies which also have ships in non-subsidized operations.

Union	Amount
International Organization of Masters, Mates and Pilots-----	\$1,368,000
National Marine Engineers' Beneficial Association-----	1,336,000
Brotherhood of Marine Officers-----	40,000
American Radio Association-----	109,000
Radio Officers Union-----	11,000
National Maritime Union-----	830,000
Seafarers International Union (Atlantic and Gulf)-----	859,000
Seafarers International Union (Pacific)-----	497,000
Total -----	5,050,000

Using the latest estimated average wage subsidy rate of 73.8 percent, the subsidy payable for the total expenditures indicated above would be \$3,726,900.

Question 6. It is my understanding that the portion of the Merchant Marine Act of 1936 pertaining to the manning of subsidized vessels by officers of the U.S. Naval Reserve is being virtually ignored so that union school graduates, probably all of whom are not reservists, are manning the vessels while recent state and Federal maritime academy graduates, nearly all commissioned Naval Reserve officers, are denied employment on these vessels which are being subsidized by the very same taxpayers struggling to finance their sons' education at the State schools. Please comment on this situation.

As a follow-up to illustrate the plight of the young men, what percentage of licensed seagoing jobs are being controlled by the major maritime unions (MM&P and MEBA) that are practicing discriminatory hiring practices? Is MARAD aware of this situation and what plans, if any, do you have to alleviate this lopsided situation?

Answer. Section 302(g) of the Merchant Marine Act of 1936 states that "All of the deck and engineer officers employed on vessels on which an operating-differential subsidy is paid under the authority of Title VI, or employed on the Commission's vessels, after one year after the passage of this Act shall, if eligible be members of the United States Naval Reserve." This provision is enforced by the Shipping Commissioners of the U.S. Coast Guard at the time that officers sign articles on board subsidized ships. With minor exceptions, all graduates of the U.S. Merchant Marine Academy are commissioned in the Navy Reserve as Ensign on graduation, under the authority of Section 216(b)(3), Merchant Marine Act, 1936. These are Unrestricted Line Inactive Commissions in the Reserve.

Maritime Administration General Order 87 (46 CFR 310.6(2)) requires that cadets enrolled for federal subsistence allowance payments at the State Academies, except at the Great Lakes Maritime Academy, must "Agree in writing to apply at an appropriate time before graduation, for a commission as Ensign in the U.S. Naval Reserve and to accept such a commission if offered." The number of commissions offered is at the discretion of the Department of the Navy. The number of applicants in the graduating classes at the five seacoast State Academies who are not offered commissions has in recent years been ranging between 20-25 per cent. These individuals receive "letters of ineligibility" which on presentation to Shipping Commissioners would enable the bearers to be signed on subsidized ships. The commissions received by State Academy graduates are Unrestricted Line Commissions basically identical to the Commissions given to King Point graduates. It should be noted that graduates of the industry-financed officer training schools are generally not eligible for Commissions of this type since a Navy prerequisite is a college education level.

In mid-1973 the Department of the Navy reestablished the Naval Reserve Merchant Marine Program which in its new form considerably broadened the eligibility limits to encompass a maximum number of active merchant marine officers. These are Restricted Line Inactive—Special Duty Commissions in the Reserve. In early 1975 the staff of the Calhoun MEBA Engineering School requested the Department of the Navy to provide letters of waivers of eligibility to those of its graduates who for personal reasons did not desire to join this Naval Reserve program. We understand that since then the Department of the Navy has issued a number of such letters which enables the carriers to be signed on subsidized ships.

With regard to the percentage of licensed seagoing jobs controlled by the MM&P and the MEBA aboard vessels of 1,000 gross tons and over, we estimate that of the deck officer jobs, about 77 percent are controlled by the MM&P and of the engine officer jobs, about 79 percent are controlled by the MEBA.

Question 7. What does the record show regarding performance on original license exams for merchant marine officers? Is there any truth to the statement that state and Federal maritime academy students had a significantly higher fail rate than that of union school graduates? A comparison was made recently that showed a very great differential in percentages of success, but I believe this was due to the "high degree of failure" group being given a new type of exam that was unique in the history of licensing programs in both its administration and its content. When these various groups are given the same exam, I am sure that the state maritime academy graduates can more than hold their own with any group. Do you have any figures that would either enforce or refute this statement?

Answer. The administration of license examinations is the responsibility of the U.S. Coast Guard which maintains the pass and fail rates of the various categories of applicants who have participated in the new Third Mate and Third Assistant Engineer objective licensing examinations. Therefore, we defer to the Coast Guard for detailed information in this matter.

It is our understanding that the new licensing examinations were introduced by the Coast Guard in January 1974. Since that time all applicants for Second or Third Mate/Assistant Engineers licenses were required to be initially examined using the new objective examinations. To provide for an orderly phasing-in period, applicants who partially or totally failed their initial examination were permitted to be reexamined with the old type (essay) examination. Since July 1975 only the use of the new examinations has been permitted by the Coast Guard for both the initial and reexaminations.

The only examination results that we maintain are for graduates from the U.S. Merchant Marine Academy. We are attaching tables showing the pass and fail rates for the Class of 1974 and 1975.

	Pass	Fail	Partial failure	Total
CLASS OF 1974				
3d mate:				
Initial examination.....	33	8	50	91
Reexamination.....	32	26	.....	58
Total pass.....	65	.....	.....	.....
Total fail (71 percent successfully passed new examination).....	26	.....	.....	.....
3d assistant engineer steam:				
Initial examination.....	39	7	42	88
Reexamination.....	37	17	.....	44
Total pass.....	76	.....	.....	.....
Total fail (86 percent successfully passed new examination).....	17	.....	.....	.....
3d assistant engineer motor:				
Initial examination.....	54	7	27	88
Reexamination.....	22	16	.....	28
Total pass.....	76	.....	.....	.....
Total fail (85 percent successfully passed new examination).....	16	.....	.....	.....
3d assistant engineer (dual license) steam motor:				
Initial examination.....	7	7	2	16
Reexamination.....	3	16	.....	9
Total pass.....	10	.....	.....	.....
Total fail (62 percent successfully passed new examination).....	16	.....	.....	.....
CLASS OF 1975				
3d mate:				
Initial examination.....	72	1	42	115
Reexamination.....	41	2	.....	43
Total pass.....	113	.....	.....	.....
Total fail (98 percent successfully passed new examination).....	2	.....	.....	.....
3d assistant engineer steam:				
Initial examination.....	76	.....	10	86
Reexamination.....	8	1	.....	9
Total pass.....	84	.....	.....	.....
Total fail (98 percent successfully passed new examination).....	1	.....	.....	.....
3d assistant engineer motor:				
Initial examination.....	77	.....	9	86
Reexamination.....	8	1	.....	9
Total pass.....	85	.....	.....	.....
Total fail (99 percent successfully passed new examination).....	1	.....	.....	.....

	Pass	Fail	Partial failure	Total
CLASS OF 1975—Continued				
3d assistant engineer (dual license) steam:				
Initial examination.....	8	4	5	17
Reexamination.....				
Total pass.....	8			
Total fail (47 percent successfully passed new examination).....	9			
3d assistant engineer (dual license) motor:				
Initial examination.....	12		5	17
Reexamination.....				
Total pass.....	12			
Total fail (70 percent successfully passed new examination).....	5			

¹ Where failure is indicated on reexamination the candidates elected to take the essay examination and successfully passed.

Note: Those midshipmen who failed the initial examination and did not elect to be reexamined with the new examination took the essay examination and passed.

Mr. DOWNING. Now, our second and final witness this morning is an old friend of the committee, Mr. Milton G. Nottingham, legislative representative of the Alumni Association of the U.S. Merchant Marine Academy.

I am glad to welcome you again, Mr. Nottingham.

STATEMENT OF MILTON G. NOTTINGHAM, JR., LEGISLATIVE REPRESENTATIVE OF THE ALUMNI ASSOCIATION OF THE U.S. MERCHANT MARINE ACADEMY

Mr. NOTTINGHAM. Thank you very much, Mr. Chairman. It is a pleasure to be here.

Mr. Chairman, gentlemen, we appreciate this opportunity to present our views on H.R. 10413 and on certain other matters pertaining to the employment and training of officers for the U.S. merchant marine.

H.R. 10413 is, as we understand it, intended to implement certain recommendations contained in the report of the ad hoc Committee on Maritime Education and Training. The alumni of Kings Point are appreciative of the recognition given to the importance to the Nation of merchant marine officer training by Chairman Leonor Sullivan in appointing the ad hoc committee and to the members of this committee under the chairmanship of Congressman Fred Rooney for their study of the subject.

A study of the Merchant Marine Act of 1936 results in the inescapable conclusion that the sponsor, Congressman Schuyler Otis Bland of Virginia, and his colleagues at that time on the Committee on Merchant Marine and Fisheries were extremely farsighted in drafting this legislation. In general, the provisions of the 1936 act are as timely today as they were when enacted. The act placed the responsibility for the supervision of the construction and operation of the U.S. merchant fleet on the Federal Government. Specifically, upon the predecessor agencies of the Maritime Administration and similarly reposed overall responsibility for maritime training upon the same agencies. These provisions stood the test of World War II when under the War Shipping Administration, a large merchant fleet was constructed and ap-

proximately one-quarter of a million merchant marine officers and seamen were trained to man these ships. The U.S. Merchant Marine Academy was created under the authority of the 1936 act and in the emergency period just prior to and during World War II, trained between 9,000 and 10,000 deck and engineer officers for wartime service in the merchant marine and in the U.S. Navy.

These Kings Point trained officers served in every theater of war. With the cessation of hostilities, the U.S. Merchant Marine Academy drastically reduced its enrollment as the American merchant fleet contracted. The Academy is recognized as one of the finest maritime officer training institutions in the world, producing highly qualified professional merchant marine and naval officers to serve on our ships at sea and in leadership roles in the maritime industry. The accomplishments of the U.S. Merchant Marine Academy must be a source of pride to the Nation and not merely to the graduates of the Academy.

Our primary purpose in appearing before you today is to provide you with the information necessary to insure that no action will be taken by the Congress that will limit Kings Point's ability to respond to the future needs of the merchant fleet and the maritime industry.

Gentlemen, we submit that in a future national emergency, the Federal Government will again, of necessity, provide the training for the seafaring personnel our merchant fleet will require. However, in section 2 of H.R. 10413, there is a statement:

It is the intention of Congress that the United States Merchant Marine Academy, the State Maritime Academies and other institutions which educate and train individuals for initial licensing as officers of the United States Merchant Marine should continue to perform this function, and that sufficient flexibility to fulfill short term emergency requirements for such officers should be maintained by schools other than the United States Merchant Marine Academy and the State Maritime Academies.

The language of this section is of the most serious concern to us, for we fear that unintentionally it could limit the contributions of the Federal and several State maritime academies in any future period of war or other national emergency. It is inconceivable that we would fail to utilize to their full potential Kings Point and the State maritime colleges in any period of national emergency. Failure to do so would be wasteful and necessitate a duplication of facilities at other installations at a tremendous cost of funds and time. We therefore urge that this section 2 of H.R. 10413 be amended by placing a period after the word "function" in line 8 and deleting all the language of this section which follows, thus, eliminating wording that would restrict the responsiveness of Kings Point and the State maritime academies in a period of emergency.

Section 3 provides in part that:

The Secretary of Commerce shall meet with representatives of the United States Merchant Marine Academy, the State Maritime Academies, and any other institution which trains individuals for initial licensing as officers in the United States Merchant Marine, for the purpose of estimating the projected enrollment at all such institutions during such fiscal year and the next three fiscal years.

The bill further provides that the Secretary shall submit a report to Congress subsequently, setting forth the enrollment estimates for such fiscal year and the next 3 fiscal years, together with his projection of the needs of the U.S. merchant marine for officers during the 4

fiscal-year periods for which such enrollment estimates are made. We believe that the intent of this section of the bill providing for information on the projected needs of the merchant marine for officers is most desirable. It is our feeling, however, that it is not possible to accurately estimate merchant marine officer requirements 4 years in advance. Changes in the composition of the merchant fleet, demands for shipping and consequent fluctuation in employment of personnel, plus attrition in officer ranks, preclude accuracy in such projections. This would not be a major concern were it not for the fact that the bill as presently drafted would limit the number of persons initially appointed to the U.S. Merchant Marine Academy to the number authorized by Congress based upon the projected needs submitted by the Secretary of Commerce.

During the past 20 years, as the State maritime academies' total enrollment doubled and the union/industry licensing schools were started, the size of the student body at Kings Point remained constant.

The Academy graduates approximately 200 licensed officers annually, the optimum minimal size at which this school can be efficiently and economically operated. We fear that if the burden of determining the number of merchant marine officer candidates to be trained in any particular period of time is placed upon the Secretary of Commerce, he may be obliged to reduce the number of students entering the U.S. Merchant Marine Academy as this is in fact the only school under the control of the Department of Commerce. The State maritime academies and the union merchant marine officer training programs are not within his cognizance. We therefore urge that by amendment to this bill or in the hearing record, the Committee on Merchant Marine and Fisheries express their desire that the enrollment at Kings Point not be reduced below the present level.

Section 4 of this bill refers to amendments to the Maritime Academy Act of 1958. Our organization, composed of graduates of the U.S. Merchant Marine Academy at Kings Point, is not specifically concerned with the amendments to this act that are provided for in this bill. We would, however, take this opportunity to state for the record that it is our conviction that the State maritime academies have made a substantial contribution to the maritime progress of our country and merit the continued support of the Federal Government. This bill provides for the current grant of \$600 per student at the State maritime academies to be increased to \$1,200. It is our further understanding that the \$600 level of Federal support was established in 1958. In view of the increased costs in operation that have taken place since that time, the increase to \$1,200 per student provided for in this bill seems quite reasonable.

Section 5 of the bill provides for the resources and programs of the National Maritime Research Center being made available to all institutions, including the Federal and State maritime academies, which train individuals for original licenses as officers in the U.S. merchant marine. We fully support the use of the National Maritime Research Center by candidates for merchant marine officer licenses regardless of the institution which they may be attending. Research and development go hand in hand with education, mutually complementing one another.

In the opinion of the alumni of Kings Point, the NMRC's research programs could benefit through the evaluation of their practical application by the students of the U.S. Merchant Marine Academy, the State maritime academies, and other merchant marine officer training institutions. Each of the merchant marine officer training institutions now existent have facilities or programs that would be beneficial to the students at other academies and training schools. In order that the maximum benefits may be derived by the students of the Federal and State maritime academies and those at the industry operated training facilities, we recommend that each training institution making use of the National Maritime Research Center agree to share with the other merchant marine officer training institutions their own facilities. Kings Point has always been pleased to share its facilities with any other training association and is currently working with the Marine Engineers Beneficial Association, District 2, on just such a program. By sharing not only the NMRC facilities but by having access to the best equipment and instruction of one another's institutions, all of the merchant marine officer candidates will benefit and ultimately the greatest benefit will come through the more efficient and safer operation of our merchant fleet.

Section 6 of the proposed bill provides for the United States Coast Guard to compile and maintain a roster of the names and addresses of all individuals less than 65 years of age who were or are licensed as officers in the U.S. merchant marine. I might add that all of our graduates are less than 65 years of age.

The purpose of this provision is to have available current information on these ship's officers in the event of a national emergency. We feel this is highly desirable. Moreover, from the records maintained by the alumni association on Kings Point graduates, we will be pleased to assist the Coast Guard in compiling the appropriate data. It is suggested that current employment information be developed as well as addresses of the maritime officer personnel since occupations could, in many cases, limit the availability of individuals for emergency service.

Section 7 provides that the Secretaries of Commerce and the Department in which the Coast Guard is operating are to undertake a thorough review of the laws, regulations, and policies pertaining to the renewal of merchant marine officer licenses to ascertain the adequacy of these tests and the retention of the basic skills of the officers tested and their knowledge of current maritime technology, regulations, and procedures. The alumni of Kings Point believe this to be a highly desirable objective and fully support it. Renewal of licenses is required each 5 years and although not automatic, it is generally perfunctory with no requirement or demonstration of current knowledge of the state of maritime technology, new procedures, and current practices.

Of equal importance, however, is one area that has not been addressed at all in this section which we feel is a most serious matter. We refer to physical standards. There are no current physical requirements that must be met by a merchant marine officer seeking to renew his license except for a test for color blindness which is required of deck officers. Moreover, there is no limitation of age on the renewal of a merchant marine officer's license.

We agree, as we have already stated, that merchant marine officers, when renewing their licenses, should be examined on current technology and practices as well as on their retention of their basic skills which were required for the initial issuance of their licenses. If, however, we are to operate our merchant ships in an efficient and safe manner, it is equally important that the officers who man them be physically fit to perform their normal duties and to respond to emergency situations. We therefore strongly urge that H.R. 10413 be amended to require that thorough physical examinations be given to all merchant marine officers seeking renewal of their licenses and those not physically fit be denied renewal of their certificates.

We trust that upon study of the recommendations that we have incorporated in this testimony, the sponsors of H.R. 10413 will agree to amending the bill as we suggest.

Before concluding our testimony, I would like to take this opportunity to bring to the attention of this subcommittee two other areas of concern with respect to the manning of the U.S. merchant fleet. Since, in your current oversight hearings, this subcommittee is concerned with the responsiveness of the U.S. merchant marine in the time of emergency, the Kings Point alumni would like you to be aware of the following:

The first matter deals with discriminatory employment practices which generally preclude the recent graduates of the U.S. Merchant Marine Academy and the State maritime academies from obtaining employment as licensed deck and engineer officers in our oceangoing merchant fleet.

Currently, the principal maritime unions, the International Organization of Masters, Mates, and Pilots and the Marine Engineers Beneficial Association, district 1, have effectively closed their membership rolls to the Federal and State maritime academies' graduates. While we recognize the need to protect the seniority rights of the members of both unions, we feel that it is essential that the young graduates of the Federal and State academies, who have been trained in large part at the Government's expense, be given an opportunity to gain practical experience as licensed deck and engineer officers. Such experience will be invaluable in time of war or other national emergency when these officers may be called upon to serve in their the merchant marine or the Navy.

One major maritime officer's union which currently denies membership in its organization to graduates of Kings Point and the State maritime academies is operating a school to train men for original licenses as engineers and has a conspicuously successful placement record for the graduates of its own institution. It is ironic and unfortunate that both major unions of merchant marine officers that now deny the young Merchant Marine Academy graduates the opportunity for employment at sea in a licensed capacity have appeared before the House of Representatives Committee on Merchant Marine and Fisheries, during recent periods of national emergency such as the Korean and Vietnam hostilities, to deplore the lack of the availability of the graduates of the academies. Obviously, if the young people are denied employment at sea in peacetime, they will naturally seek opportunities elsewhere. They are much sought after because of the quality of their education and generally find employment in maritime-related activities

when denied the opportunity for employment in the primary area for which they were trained—the oceangoing fleet of the U.S. merchant marine. We trust that the Congress will impose an obligation on the maritime officer's unions to relax their requirements for membership in order that employment opportunities afloat as licensed officers be accorded the graduates of the Federal and State maritime academies, thus enhancing their ability to respond to the needs of their country in the time of national emergency.

Second, the U.S. Merchant Marine Academy and the several State maritime academies and colleges are one of the largest sources of Naval Reserve officer personnel. The training programs conducted at these institutions thus make a substantial contribution to the defense posture of the Nation as well as to its peacetime need for skilled professional ship's officer personnel.

Upon the outbreak of World War II, a substantial number of our merchant ships that were constructed pursuant to the Merchant Marine Act of 1936 and manned with Naval Reserve officer personnel, similarly provided for in the same act, were called into the service by the Navy as naval auxiliaries. We note today that while the Soviet Union has a completely integrated maritime organization with its merchant marine and fishing fleet complementing its naval forces, our own merchant fleet is less prepared for mobilization than it was prior to World War II.

There is, to the best of our knowledge, not a single merchant ship today flying the U.S. Naval Reserve pennant. In other words, although our merchant ships are still being built with defense features required by the Navy, almost no consideration is given to the requirement of title III, section 302(g) of the Merchant Marine Act of 1936 which provides that all officers on vessels for which their operators receive operating differential subsidy the members of the Naval Reserve.

While we believe in the issuance of waiver to permit non-Naval Reserve officers to serve on subsidized vessels, we do feel that these waivers should not be issued indiscriminately, but only after the ship's officer concerned has made a bona fide effort to qualify for membership in the Naval Reserve. We urge that this subcommittee bring to the attention of the Maritime Administration and to the U.S. Navy this provision of law and ask for a report on the implementation of that provision of the Merchant Marine Act of 1936 referring to the employment of merchant marine officers who are concurrently Naval Reservists on the ships of our subsidized fleet.

Thank you, Mr. Chairman, and gentlemen, for your kind attention and this opportunity to present the views of the alumni of the U.S. Merchant Marine Academy.

Mr. DOWNING. Thank you very much.

You have been before this committee over the years not only on matters pertaining to Kings Point but matters pertaining to maritime.

Mr. Biaggi?

Mr. BIAGGI. I have no questions, Mr. Chairman. I am grateful for your support of the bill and your comments.

Mr. NORRINGTON. I might add, Mr. Biaggi, that I think this \$1,200 is a minimal figure and that there should be a provision for further increases without the necessity of returning each several years and asking for new legislation to authorize increases and support. We suggest

some flexibility in the legislation that might be passed by the Congress providing for increase of the base, either a formula such as the consumer price index or another formula that would be workable and mutually acceptable to the Maritime Administration and State academies.

Mr. DOWNING. Mr. Ellberg?

Mr. ELLBERG. I appreciate the fine statement and I have no questions, Mr. Chairman.

Mr. DOWNING. I have a few questions, Mr. Nottingham, that I would like to ask.

In the proposed amendment to section 2 in which you suggest that all the words after the word "function" be deleted. Would you elaborate on that?

Mr. NOTTINGHAM. It refers to the emergency needs of the Nation for merchant marine officers other than the U.S. Merchant Marine Academy.

Mr. DOWNING. Would that not be necessary in an emergency?

Mr. NOTTINGHAM. Yes, sir. But this would specifically preclude those, as I understand the language. It would limit their role to carrying on the same enrollment approved by the Congress, as it is worded. If not, the intent, I think, it would have need for clarification. In a national emergency we would be turning to the union schools for the sources of officer personnel and maintaining the enrollment at the Federal and State academies at a static level and that does not seem to be consistent with me.

Mr. DOWNING. Well, that is not the intention of the sponsors of this bill and perhaps that can be clarified either by the amendment you suggest or by—

Mr. CORRADO. Would the chairman yield?

Mr. DOWNING. Mr. Corrado.

Mr. CORRADO. I think all we intended, Mr. Chairman, was that in the event of national emergency all the available resources should be drawn upon and we were just trying to say that because of the union schools ability to respond on a short term basis they were the best available source for those circumstances. We were trying to point out that we felt that they probably would be a better source in this particular situation. But we had no intention of blocking any resource or any other school or any other source. All we were trying to get at was flexibility.

Mr. DOWNING. I think that is the intention of the sponsors and we will do whatever is necessary to correct that. Certainly in the event of a national emergency we would want every available source to be available to us and the union schools certainly provide merchant officers in a short time, such as the Vietnam war.

Now, on page 4 you state, "It is our feeling, however, that it is not possible to accurately estimate merchant marine officer requirements 4 years in advance."

Do you think there should be some language as to how many officers we should educate even though the estimate may not be exactly correct?

Mr. NOTTINGHAM. Yes, indeed. And we do not suggest that the projection is not a necessity but we feel that it is a question of accuracy and we are concerned that on the basis of the projection the enrollment at the State and Federal academies would be contracted or governed and we feel you cannot estimate accurately 4 years hence what we require.

And I think in this sense I would have to associate myself with the general counsel of Maritime Administration that it is not the number of men entering the schools that we need to be concerned with but what will be the situation 4 years hence when they graduate. I think if you bear with me, Mr. Chairman, what we are trying to say is we do not disagree; we are concerned that on the basis of the projected enrollment the Federal and State academies will be locked in and this will not be a good thing.

Mr. DOWNING. I think that your suggestion on page 5 of your testimony needs to be added to. You express the desire that the enrollment at Kings Point not be reduced below the present level and I think the suggestion is a good one.

Mr. NOTTINGHAM. Thank you, sir.

Mr. DOWNING. Now, you say there are no current physical requirements for officers in the merchant marine?

Mr. NOTTINGHAM. Yes, sir. And I think it is a matter that is long overdue for consideration of the Congress. We have today a middle aged, Mr. Chairman, merchant marine officer body afloat. We have 65- and 70-year-old officers serving today.

Mr. DOWNING. What is the average age of the men serving aboard the merchant marine today?

Mr. NOTTINGHAM. I cannot give you an exact age but I would say it is between the late 1940's and early 1950s.

Mr. DOWNING. And no physical requirements?

Mr. NOTTINGHAM. None other than the eye test and that is for color blindness for deck officers.

The record, I might say, of accidents and injuries and illness aboard merchant marine vessels is a matter of great concern to the industry and I would hope this committee would invite the insurance companies that provide these records, such as the Marine Index Bureau of New York to give you these figures. I think you might be shocked by them.

I might also point out, Mr. Chairman, and gentlemen, that in the event that we did have a retirement age and we did have physical requirements that had to be met, some of the young men that are today denied opportunities for employment as deck and engineer officers would find jobs and I am not suggesting that we be unkind to anyone. I certainly feel that within the labor management negotiations provisions can be made for retirement, an early retirement if necessary, for anyone physically unfit. But we cannot possibly imagine an aircraft which is being piloted by someone disabled and yet we have a merchant ship carrying a cargo worth millions of dollars, a ship in which the United States Government may have invested millions of dollars, to be entrusted to officers and crew who may not be physically well.

Mr. DOWNING. How would this work in practice? How would these seamen obtain this physical?

Mr. NOTTINGHAM. Today the requirement for renewal of licenses for deck officers means he goes to the U.S. Public Health Service to have his eyes tested for color blindness. If this recommendation is implemented the U.S. Health Service would give a thorough physical to each officer seeking a license or renewal of license. In turn, one requirement the Coast Guard would have to follow would be to take the man if he was physically fit and if he was not, he would not be accepted for license. I do not understand why we have not done something in the merchant marine long before this, whereas in other industries where

the demands are far less than for the men at sea such requirements exist.

Mr. DOWNING. Now, let us get into the matter of alleged discrimination in employment practices by the unions.

Are you telling us that the unions are denying admission to the graduates of the Merchant Marine Academy and State maritime schools but not to graduates of their own schools?

Mr. NORRINGTON. They are not always in favor of their own schools, not both of the major unions that I single out in my testimony have programs training for men for original license. The deck officers union, the Masters, Mates, and Pilots Organization, does not. They have a very fine facility but it trains currently for upgrading from third mate to second mate and to chief mate for example. The MEBA does have an original license program for training men for licenses in their facility in Baltimore. There is a lessening of job opportunities. Both unions have sought to protect their membership and to this extent they have denied newly licensed officer personnel membership in their unions. Since they have contracts with the majority of the shipping companies operating oceangoing vessels this effectively denies the graduates of the Federal and State academies an opportunity to sail on their licenses. However, in the case of the MEBA, they have found ways to provide jobs for their own school's graduates and they have and do take in their own people. That is, those young men who came to their school and stayed for 3 years for training. They find job opportunities for, I am told, 95 percent of them.

Mr. DOWNING. Now, every man who graduates as an officer from the Marine Academy has to join the union before he goes to sea, is that not correct?

Mr. NORRINGTON. Either that or sail with a nonunion company. There are a few companies that have contracts with other than the major unions and some of the graduates of the Federal and State academies go into the Navy or other military service. Some go into other fields of endeavor of necessity in some cases; Offshore drilling, the Great Lakes transportation, harbor towing, where membership is not a requirement in those unions.

Mr. DOWNING. Is it a fact that the merchant marine officer is denied joining the union is not given a shipboard job?

Mr. NORRINGTON. The Mates and Pilots Organization goes one step further. They will take the money from them and give them what they call an application for membership and under those circumstances they can sit in a union hall and wait for the possibility of a job opening and if no senior man, no member, full book member of the union applies for the job they will be given the opportunity to take that ship out. They are not a full member of the union. They are just an applicant for membership; or they hold an application for membership, I should say.

One of the serious problems, and it has been so on numerous occasions, is if the ship is running the coast of the United States, this young man may board the ship for example in Boston and then in New York they will take him off and put on instead a full book union member.

Mr. DOWNING. Do you have figures to substantiate this statement?

Mr. NORRINGTON. Yes, sir; I do.

I have figures to show what percentage we have and I can show the restrictions of the union that have taken effect and how job opportunities afloat decrease, on the member going fleet have declined.

Mr. DOWNING. Do you have those figures available now?

Mr. NOTTINGHAM. Yes, sir.

Mr. DOWNING. Would you summarize them?

Mr. NOTTINGHAM. In 1969, 94.3 percent of the graduates of Kings Point sailed in the merchant marine on their licenses.

In 1970, 75.3 percent. In 1971, 37 percent. In 1972, 38.5 percent. In 1973, 51 percent. In 1974, 57 percent. In 1975, 48 percent.

Now this does not mean that these men were all on oceangoing ships. Some of them were sailing on tugs and other vessels requiring licenses—for example on the offshore drilling vessels. During Vietnam, for example, class after class went to sea upon graduation. We stopped these men from entering the Navy or the Coast Guard so they could sail on their license. When the unions closed their books in 1969 and 1970, as you will see from the figures that I have just quoted, the percentage dropped. In 1969, nearly everyone in the class of that year were able to sail. With the class of 1970, the number went down when the Kings Pointers of necessity moved into other areas.

The employment trend continued upward in nonunion seafaring employment until the current recession set it back somewhat.

This year when we made the survey through the alumni there were 95 men or 48 percent of the graduating class sailing on their license. There were 29 other men on beach awaiting a berth. But to these I should add those on military duty of 27 percent. And those ashore. But as far as the oceangoing berths, no one of our men of the last graduating class obtained an appointment to an oceangoing vessel under contract to either of the two major unions I have mentioned.

Mr. DOWNING. Not a single graduate?

Mr. NOTTINGHAM. Not a graduate.

Forty-six of the men in the class of 1975 did find berths with tanker firms, with American export lines, or with the Corps of Army Engineers on dredges; others on offshore drilling or supply boats. This is well over 10 percent of the class; 11 on tugs and 6 on inland waterway vessels. We expected to place a lot of men in the Great Lakes but the recession has affected the inland waterways and the Great Lakes waterways as well. So some of those opportunities were denied and just were not available in the inland waterways.

Mr. DOWNING. You are citing figures from Kings Point. What about the graduates from the State academies?

Mr. NOTTINGHAM. I think their position would be exactly the same. The restrictions are not limited to Kings Point.

Mr. DOWNING. Could you, Mr. Nottingham, firm up those figures from the State maritime academies? Do you have any way of doing that?

Mr. NOTTINGHAM. Yes, sir. Through the Council of Maritime Academies Alumni Associations, we all work together and I certainly will endeavor to provide that information.

Mr. DOWNING. We would appreciate it if you would supply that information.

There is nothing illegal about that on the part of the union, is there?

MR. NOTTINGHAM. No. But I think we have to face one thing that we oftentimes lose sight of. We hear the reference made to industry schools. And they could not exist except for subsidy paid by the United States. Therefore, these funds provided for the training in the union training schools does not come solely or entirely from shipping companies or from the unions; they do not come from the union membership. They come from Federal funds indirectly. They are eligible for inclusion in subsidy and therefore the shipping companies charge these expenses up to the Government of the United States. Consequently, the Federal Government has a stake in the union training school programs.

MR. EILBERG. Mr. Chairman?

MR. DOWNING. Yes, Mr. Eilberg.

MR. EILBERG. It seems to me that Mr. Nottingham is presenting only one side of the story and I wonder if there would be an opportunity for the organizations involved to be given an opportunity to testify or respond to the statements made here today?

MR. DOWNING. I agree with you. I think we should hear the other side of it, too. Because if what Mr. Nottingham says is true it would be a most unfair practice, I would think. I can understand the unions desire to protect their membership but they also have other obligations.

MR. CORRADO. Mr. Chairman, would you yield?

MR. DOWNING. I yield.

MR. CORRADO. I would hope that these hearings would continue on and we would have the opportunity to hear from the schools and then another day to hear from the unions, and any other interested witnesses that might be called. I would hope we would hear from everyone, Mr. Chairman, if the chairman would do that.

MR. DOWNING. I think we should go into this.

Now, Mr. Nottingham, the union schools have some form of physical requirements before they are graduated and sent to sea; do they not?

MR. NOTTINGHAM. I am not aware of their requirements, sir, so I cannot properly answer that question. I think that question would have to be directed to them.

MR. DOWNING. Well, I think we ought to go into this further. One final question concerns the Naval Reserve status of the merchant marine officers. A graduate from Kings Point is automatically in the Naval Reserve, is he not?

MR. NOTTINGHAM. He is not accepted as a student at Kings Point under normal circumstances. Mr. Chairman — although there have been one or two exceptions due to humanitarian considerations. But with those exceptions he is not accepted by the Academy unless accepted for appointment as a midshipman in the U.S. Naval Reserve. Upon graduation he is tendered, at the same time he receives his diploma from the Academy and his license as a third officer in the merchant marine, a commission in the Naval Reserve.

MR. DOWNING. And is automatically in the Reserve?

MR. NOTTINGHAM. Yes, sir.

MR. DOWNING. And he maintains that status?

MR. NOTTINGHAM. Yes, sir. That depends upon the individual and the Navy's requirements which change time to time for an officer to be considered satisfactorily participating in the Naval Reserve.

MR. DOWNING. Is it true of the State maritime academies' graduates?

Mr. NOTTINGHAM. It is not quite the same with those students because to the best of my knowledge they are not all in the Naval Reserve. I am sure many of them are not while students. Subsequently upon graduation they do not all go into the Naval Reserve but I think the larger part do.

Mr. DOWNING. You suggest this should be mandatory?

Mr. NOTTINGHAM. No; I do not want to say that all merchant marine officers should be reservists. But I do suggest however, that the provision in the Merchant Marine Act of 1936 providing that subsidized vessels, that is, those vessels receiving operational subsidy be manned by naval officer personnel be enforced. This manning makes possible the immediate callup of these ships for use as naval auxiliaries. This was important in World War II and I suggest it would be equally important in a similar national emergency today. Currently that provision is not being implemented. The majority of officers in our merchant fleet today are not naval reservists. This in spite of the fact the Navy permits men who come up through the rank of seaman, or from schools such as that operated by MEBA to qualify for appointment in the Naval Reserve.

Mr. DOWNING. Did I understand you to say the Merchant Marine Act of 1936 imposes this requirement?

Mr. NOTTINGHAM. Yes, it does. If eligible officers serving on ships receiving subsidies, those receiving operating differential subsidies, are required to be members of the U. S. Naval Reserve.

Mr. DOWNING. Then there is no need for new legislation. Is that required and this is a responsibility of the Maritime Administration?

Mr. NOTTINGHAM. Yes.

Mr. DOWNING. I would like to have counsel followup on that.

Thank you very much, Mr. Nottingham.

The subcommittee is adjourned subject to call of the chair.

[Thereupon, the subcommittee was recessed at 11:22 a. m., subject to call of the chair.]

MARITIME EDUCATION AND TRAINING

WEDNESDAY, DECEMBER 3, 1975

HOUSE OF REPRESENTATIVES,
COMMITTEE ON MERCHANT MARINE AND FISHERIES,
SUBCOMMITTEE ON MERCHANT MARINE,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:05 a.m., in room 1334 Longworth House Office Building, Hon. Thomas N. Downing, subcommittee chairman, presiding.

Mr. DOWNING. The subcommittee will please come to order.

We are meeting this morning to continue hearings on a number of bills pertaining to the education and training of individuals who serve as officers of the U.S. merchant marine.

Two of the bills we will be considering this morning, H.R. 1626 and H.R. 9864, would increase the annual subsistence allowance of students in the State maritime academies from \$600 to \$1,200.

Together with several members of the subcommittee I have cosponsored with Mrs. Sullivan, chairman of the full committee, H.R. 10413, and another identical bill, H.R. 10500. These bills are intended to implement the recommendations of nearly a 2-year study of our Nation's principal maritime schools conducted by a six-member ad hoc committee on maritime education and training during the last Congress.

Mrs. Sullivan's more comprehensive bill contains a provision identical to that of the other two bills before the subcommittee this morning, but also addresses a number of other issues, some of which pertain to the responsibility of the U.S. Coast Guard in the area of maritime education and training.

Our first witness this morning is Rear Adm. William Benkert, Chief, Office of Merchant Marine Safety, U.S. Coast Guard.

Admiral, if you will come forward, you may proceed.

STATEMENT OF REAR ADM. WILLIAM M. BENKERT, CHIEF, OFFICE OF MERCHANT MARINE SAFETY, U.S. COAST GUARD, ACCOMPANIED BY COMDR. BEN JOYCE

Admiral BENKERT. Good morning, Madam Chairman and Mr. Chairman.

With your permission, I have Comdr. Ben Joyce with me from my Office of Merchant Marine Safety. He is in our Merchant Vessel Personnel Division, and directly associated with our work in training of merchant marine personnel, and manning of vessels.

Mr. DOWNING. That is quite all right.

(29)

Admiral BENKERT. I have a prepared statement, Mr. Chairman, and with your permission I would like to read at least a portion of it, and perhaps paraphrase the latter part of it, if I may.

Mr. DOWNING. Without objection your statement will be placed in the record, and you may proceed as you wish.

Admiral BENKERT. Thank you, sir.

Madam Chairman, Mr. Chairman, and members of the subcommittee, I am Rear Adm. W. M. Benkert, Chief of the Office of Merchant Marine Safety, U.S. Coast Guard. It is a pleasure for me to appear before you today on behalf of the Coast Guard to discuss the various aspects of the Maritime Education and Training Act of 1975, H.R. 10413, in areas where hopefully the U.S. Coast Guard can provide assistance.

As you know, Mr. Chairman, the Coast Guard takes an active interest in and is acutely aware of the important role that the U.S. Merchant Marine Academy, State maritime academies and other institutions, which train and educate individuals for licensing as officers in the U.S. merchant marine, play in the manning of our merchant fleet today, and for that matter, in our entire marine industry.

However, with respect to comments on the particulars contained in sections 2, 3, and 5 and methods for attaining the desired goal, we defer to the Commerce Department toward which these sections are primarily directed.

Section 4(1) of the bill requires that training ships made available by the Secretary of Commerce to State academies shall be manned in accordance with Coast Guard standards. Although the Coast Guard currently has authority to require manning on the nautical schoolships, as pointed out in the statement of Mr. A. Reading Van Doren, Jr., general counsel of the Maritime Administration, of October 30, 1975, realization of this authority is gained through interpretation of statutes and is not presently spelled out in any statute as clearly as it is here.

Accordingly, I am in favor of amending this portion of the act of 1958 as proposed. In addition, I would like to clarify the record with respect to Mr. Van Doren's statement concerning the Coast Guard notice of proposed rulemaking in the January 21, 1975 edition of the Federal Register regarding manning of nautical schoolships.

Mr. Van Doren was correct in stating that the proposed notice contained provisions which would permit students of schoolships to perform required watchstanding duties when they are considered qualified to do so by the master of the vessel.

However, after considering the comments received on the proposed rule and after a thorough review of the legality of such a rule, we have decided to withdraw that particular provision. The final rule will state that the officer in charge of marine inspection shall specify in the certificate of inspection the minimum complement of officers and crew necessary for safe navigation of the vessel and shall specify the total number of persons permitted to be carried.

Section 6 of the bill would require the Coast Guard to take such action as necessary to compile and keep current a roster of the names and addresses of all individuals who have not attained the age of 65 years and who are, or at any time were, licensed officers in the U.S. merchant marine. The Coast Guard presently does maintain generally such information.

However, as I pointed out in my testimony to the ad hoc committee on maritime education and training, this information is not presently in the form that can be readily retrieved. Steps are being taken to modernize our recordkeeping system based on a study conducted by the National Archives and Records Service in 1974. We have obligated \$150,000 for this purpose in fiscal year 1976. It is anticipated that this system will be operational by fiscal year 1979. At that time, the information required by section 6 could be programed into the system and made available on demand, current to within 5 years. This is the timeframe between our normal license renewal transactions.

In the meantime, the required data would have to be compiled by manual methods. Although this can be accomplished, it must be recognized that it will be a costly and time-consuming task.

In regard to section 7 of the bill, the Coast Guard is presently engaged in a study of the laws, regulations, and policies which pertain not only to the renewal of licenses, but also to original issue.

We have found that with the trend toward a more complex maritime industry, there is a growing need for training in critical skill areas, as well as a need for periodic retraining. In continuing our efforts in this area, the Coast Guard entered into an agreement with the Maritime Administration in September 1974 to work together in establishing courses to obtain the desired goal of insuring adequately qualified crews demanded by today's vessels.

In addition, the Coast Guard is active in establishing international standards for crew qualifications and training by our participating on the Inter-Governmental Maritime Consultative Organization's Subcommittee on Standards of Training and Watchkeeping.

Information derived from our efforts in these areas of concern can be made available for the joint study which is proposed by this section of the bill, and I believe that recommendations beneficial to the needs of the maritime industry will result.

The final portions of my statement have to do with certain statistical figures which the Coast Guard compiled and presented at the request of the committee some short time back, and in a general description of them, sir, I would simply like to say that as my formal statement says, they are a little on the sketchy side. They are not the best figures in the world. They have not been compiled over a lengthy period of time, and I personally feel that too much credence at this time should not be placed upon them.

Mr. DOWNING. Which figures are they, Admiral?

Admiral BENKERR. These, sir, are figures relative to the examination programs held for the graduates of the various State maritime academies, Kings Point, and from the maritime industry at large.

They are substantive to a certain degree, but only over a limited time period, and I think that within the next several years we will be able to do much better with this type of statistical figure analysis, sir.

Mr. DOWNING. I see here that the Massachusetts Maritime Academy only 7 percent passed the Coast Guard.

Admiral BENKERR. Yes, sir. I do not have that figure directly in front of me. I think Commander Joice does, but in a way of explanation of these figures it should be understood that this involved a change of examination procedure over a very short period of time, and the figures are now getting better, and becoming comparable to what we

previously had statistically regarding passing and failing of graduates of the various schools, sir.

Mr. Chairman, that concludes my prepared statement, and I would be most pleased to answer any questions that you might have, sir.

[The full prepared statement of Admiral Benkert follows:]

STATEMENT OF REAR ADMIRAL WILLIAM M. BENKERT, CHIEF, OFFICE OF
MERCHANT MARINE SAFETY, U.S. COAST GUARD

Mr. Chairman and members of the subcommittee, I am Rear Admiral W. M. Benkert, Chief of the Office of Merchant Marine Safety, U.S. Coast Guard. It is a pleasure for me to appear before you today on behalf of the Coast Guard to discuss the various aspects of the Maritime Education and Training Act of 1975 (H.R. 10413) in areas where hopefully the U.S. Coast Guard can provide assistance.

As you know, Mr. Chairman, the Coast Guard takes an active interest in and is acutely aware of the important role that the United States Merchant Marine Academy, State maritime academics and other institutions, which train and educate individuals for licensing as officers in the United States Merchant Marine, play in the manning of our merchant fleet today. However, with respect to comments on the particulars contained in section 2, 3, and 5 and methods for attaining the desired goal, we defer to the Commerce Department toward which these sections are primarily directed.

Section 4(1) of the bill requires that training ships made available by the Secretary of Commerce to State academies shall be manned in accordance with Coast Guard standards. Although the Coast Guard currently has authority to require manning on the nautical schoolships, as pointed out in the statement of Mr. A. Reading Van Doren, Jr., General Counsel of the Maritime Administration, of October 30, 1975, realization of this authority is gained through interpretation of statutes and is not presently spelled out in any statute as clearly as it is here. Accordingly, I am in favor of amending this portion of the act of 1958 as proposed. In addition, I would like to clarify the record with respect to Mr. Van Doren's statement concerning the Coast Guard notice of proposed rule-making in the January 21, 1975 edition of the Federal Register regarding manning of nautical schoolships. Mr. Van Doren was correct in stating that the proposed notice contained provisions which would permit students of schoolships to perform required watchstanding duties when they are considered qualified to do so by the master of the vessel. However, after considering the comments received on the proposed rule and after a thorough review of the legality of such a rule, we have decided to withdraw that particular provision. The final rule will state that the officer in charge of marine inspection shall specify in the certificate of inspection the minimum complement of officers and crew necessary for safe navigation of the vessel and shall specify the total number of persons permitted to be carried.

Section 6 of the bill would require the Coast Guard to take such action as necessary to compile and keep current a roster of the names and addresses of all individuals who have not attained the age of 65 years and who are, or at any time were, licensed officers in the U.S. Merchant Marine. The Coast Guard presently does maintain generally such information. However, as I pointed out in my testimony to the Ad Hoc Committee on Maritime Education and Training, this information is not presently in the form that can be readily retrieved. Steps are being taken to modernize our record-keeping system based on a study conducted by the National Archives and Records Service in 1974. We have obligated \$150,000 for this purpose in fiscal year 1976. It is anticipated that this system will be operational by fiscal year 1979. At that time, the information required by section 6 could be programed into the system and made available on demand, current to within 5 years. This is the time frame between license renewal transactions. In the meantime, the required data would have to be compiled by manual methods. Although this can be accomplished, it must be recognized that it will be a costly and time-consuming task.

In regard to section 7 of the bill, the Coast Guard is presently engaged in a study of the laws, regulations, and policies which pertain not only to the renewal of licenses, but also to original issue. We have found that with the trend toward a more complex maritime industry, there is a growing need for training in critical

skill areas as well as a need for periodic retraining. In continuing our efforts in this area, the Coast Guard entered into an agreement with the Maritime Administration in September 1974 to work together in establishing courses to obtain the desired goal of insuring adequately qualified crews demanded by today's vessels. In addition, the Coast Guard is active in establishing international standards for crew qualifications and training by our participating on the inter-governmental maritime consultative organization's subcommittee on standards of training and watchkeeping.

Information derived from our efforts in these areas of concern can be made available for the joint study which is proposed by this bill and I believe that recommendations beneficial to the needs of the maritime industry will result.

Before closing there is one other item I would like to discuss. A few weeks ago the Coast Guard provided to this subcommittee statistics on the success of the various institutions that educate and train personnel sitting for their original licenses in the Merchant Marine.

These figures represented a period extending from December 1973 to October 1975. There is no definitive data available prior to December 1973, since this is the date that the new objective, multiple-choice type examination was first administered. This is also the date that statistics identifying the source of training were first compiled.

These statistics must be considered in the light of several factors. Industry and the Coast Guard recognized that some examination areas were not responsive to operational changes at sea. Additionally, during the 1960's, technological advances in the maritime area were significant, rendering many parts of the subjective examination inadequate. The decision was made that revision was impractical and total replacement was necessary.

The Coast Guard in the mid-1960's contracted the services of educational testing institute to help develop the new examination. As a follow-on, we solicited the assistance in the form of question writing of licensed mariners aboard ship and those associated with the marine industry including private sector training organizations. An objective, multiple-choice type examination was developed that reflected the type of knowledge required by an "at sea" officer. In December 1973, the new examination was administered for the first time to Maritime Academy candidates since they provided the largest group possible to monitor and would give the best indications of any problems.

The Coast Guard, aware that the instructors at these institutions were not accustomed to preparing students for an objective-type examination and that there would be a need for a transition period from the subjective essay to the objective multiple-choice examination, permitted candidates failing the new examination to be reexamined with either the essay or multiple-choice method. This transition period applied to all candidates making application prior to January 1, 1975.

The Coast Guard compiled statistics only on the multiple-choice examination. Conclusions derived from these statistics are not definitive for the following basic reasons:

1. Although the statistics are representative of how well the group did initially, the exam method was new to both the students and the instructors who prepared the students for the examination. We believe that once the academies become better oriented to this type of license examination that the percentage of successful completion will return to about 70% as it was in the past.

2. Statistics on reexamination success are compiled only for those candidates who are reexamined by the multiple-choice method. They are not compiled for those candidates who chose to be reexamined under the essay method. In addition, reexaminations were administered to a group, only in those cases where enough candidates could be mustered to make a group reexamination feasible. Candidates who were not available for, or could not participate in, a group reexamination would be tested individually at a marine inspection office and their pass/fail statistic would not be reflected as part of the original group.

In summary, since the transition period for the examinations is over and many of the problem areas experienced during the early stages of administering the multiple-choice exam have been resolved, the Coast Guard feels the statistical data in the future will be more definitive.

Thank you Mr. Chairman, I will be pleased to answer any questions you or members of the committee may wish to ask.

Mr. DOWNING. Thank you very much, Admiral.

Before asking my questions, I will defer to my very able chairman, Mrs. Sullivan.

Mrs. SULLIVAN. Thank you, Mr. Chairman.

I am delighted I can be here this morning, and hear you, Admiral, and also the representatives of the academies.

I would like to have more explanation on these examination results. I do not quite understand, as I read them, unless you feel that they are not accurate enough that we should pay attention to these until you get some better figures.

Admiral BENKERT. I really feel, Mrs. Sullivan, if I may say so, they are accurate within a very limited timeframe, and under a rather unusual set of circumstances of a change in the examination scope and format, and I honestly do not believe they are at all a fair appraisal of the program.

We have, as I say in my prepared statement, actual figures for roughly a 2-year period, during which, for the third mate and the third assistant engineer licenses, the examination was changed as a result of a rather extensive study and consultation with all facets of the industry, looking toward a more objective type of examination procedure, a modern examination, rather than our previous essay-type examination.

This did create, on the spot, some rather strenuous difficulties for the schools involved and for many of the candidates. We sort of anticipated that this would happen, and gradually we are now approaching a situation where we would get a much better appraisal from now on into the future.

Mrs. SULLIVAN. Will you be using the same type of examination that you have just sort of gone through, and possibly include in the future?

Admiral BENKERT. Yes, we will.

Mrs. SULLIVAN. So to give us a comparison of what is happening this year with this kind of report.

Admiral BENKERT. Yes, we will be able to give a very good comparison as this year progresses, and in the future.

Mrs. SULLIVAN. I think many of us were quite concerned about what was happening with the students in the State academies, as well as our own Merchant Marine Academy, and how many were continuing, how many graduated, how many took examinations for licensing, and what happened.

Now, you mention in your testimony that this information we have requested is going to be costly. Is it going to be difficult to assemble? Do you feel this kind of information is worthwhile or not?

Admiral BENKERT. I personally feel it is, Mrs. Sullivan; yes, I do, because I feel that the product, if you will, that the State maritime academies, Kings Point and at the various industry-sponsored schools turn out is a very important product.

I personally believe—and I speak for the Coast Guard in this—that this type of information is of value, that it should be compiled, and we should have a handle on what kind of results we are getting from the various schools, and what happens to the people, and what utilization becomes of their education and their training.

Yes, Mrs. Sullivan, I do.

Mrs. SULLIVAN. We started the ad hoc committee, and had the members visit every one of the academies, and started to assemble questions.

I must say that we probably were not as proficient as we could have been had we been educated, or had a more intimate knowledge of what was required, but I thought that the questions that were addressed to each academy had some meaning. I think most of the academies answered as clearly and truthfully as they possibly could.

But I must say this: It was the opinion of many of us that as long as Government was assisting in a number of ways in the State academies, as well as in our own Merchant Marine Academy, that we had a responsibility to see how these graduates were used.

It is marvelous to have a wonderful education, but I do not know why the taxpayers should have to pay for the education if these graduates are not going to serve the Government.

I realize in our other military academies they must serve for a 5-year period. Many stay on, and many do not, but at least they have the requirement of serving the Government for a period of time.

Now, I realize the other graduates from the other academies join in the reserve program, but how often is that reserve group tapped for actual duty, and how much time of their own do they give in reserve duty so that they would be ready if called?

I think the things we were trying to find out, and trying to clarify, and get on the record was necessary in order to give the public what they are paying for.

Admiral BENKERT. Yes, Ma'am.

Mrs. SULLIVAN. I have just a couple of questions, Admiral Benkert. Would you please explain more fully why the Coast Guard changed from an essay to objective examinations in December 1972?

Admiral BENKERT. Yes, ma'am. There were several very major reasons, Mrs. Sullivan.

In my mind, the major one was that over the years we had developed in the Coast Guard a very extensive set of essay-type questions for all of our license examinations.

The giving of an examination to an individual involved in some cases a period of time, extending up to several weeks for an individual to take an examination. He was faced with a requirement to write a tremendous amount of words to respond to some rather extensive, and in many cases, broad and general, but some specific type of essay questions.

Mrs. Sullivan, many individuals had a very difficult time with the pure writing of this type of exam. We felt on examining them that in many cases they were not really producing a fair appraisal of the individual's worth.

In addition, I think a very large point was that the correction, if you will, of these examinations by our examining personnel involved a tremendous amount of time, if they did a full scale, honest job on it, which we hoped they did, but it also involved a certain subjective appraisal, if you will, of the responses to the questions by the individual.

One man's answer might be a three-page answer on a response to a particular question, and it would depend on the personality and the

feeling, the personal approach of the man correcting the examination, as to whether it was a good answer or not.

As a result of this, we commissioned a study to be done of this system trying to look toward some more modern examination procedures which have, of course, become prevalent in all walks of educational life today. As a result of this study, and a very thorough consultation with all parts of the marine industry, including the various maritime schools, both State and Federal, industry-operated and individuals who were licensed officers (we had a large number of people involved in this), it was felt by developing objective-type, multiple-choice, yes-and-no-type questions and responses, that we could find out better what an individual's worth was directly in a much more simple straightforward manner and a much easier way for the individual, and also a better way of doing business from our point of view as the examiner.

I think those are the major reasons, Mrs. Sullivan.

Mrs. SULLIVAN. Do you have knowledge of whether the State academies in their curriculums stress as heavily English and literature, and so on, as they would in a university?

Admiral BENKERR. I think probably the question could be answered better by their representatives, Mrs. Sullivan, but I must say that I do remember on examination-correcting myself, many years ago, to try to read many individual handwritings, and try to get to the point of what he was driving at, and the response was very difficult in an essay examination.

Mrs. SULLIVAN. Could you remember, or tell the difference of those who might have attended the Merchant Marine Academies or the State academies?

Admiral BENKERR. My personal feeling has always been, Mrs. Sullivan, that the State academies and Kings Point turned out extremely qualified people who did very well.

We had some people, and this is purely a personal recollection from reading examinations years ago, that we did have some problems with writing, with legibility, and with composition in the essay type question, and I do not think this is anything new.

Mrs. SULLIVAN. You cannot fault the academies for that. That all goes back to the third and fourth grades when they are beginning to write.

Would you identify specifically every individual or association of the maritime industry which you state assisted the Coast Guard in the formation of questions for the new examinations, and the number of questions submitted by each of these sources?

Are these same questions still being used?

Admiral BENKERR. We can provide this information for the record later, Mrs. Sullivan.

Mrs. SULLIVAN. If you will do that, please.

Admiral BENKERR. Yes, Ma'am.

[The following was received for the record:]

U.S. COAST GUARD,
DEPARTMENT OF TRANSPORTATION,
Washington, D.C., March 8, 1976.

HON. LEONOR K. SULLIVAN,
*Chairman, Committee on Merchant Marine and Fisheries,
House of Representatives,
Washington, D.C.*

DEAR MADAM CHAIRMAN: On 3 December 1975, Rear Admiral W. M. Benkert, Chief, Office of Merchant Marine Safety, U.S. Coast Guard testified before your Subcommittee on Maritime Education and Training on the elements of the Maritime Training and Education Act of 1975 (H.R. 10413). At that time, the committee requested the following additional information:

1. (a) The identity of every individual or association of the maritime industry who assisted the Coast Guard in the formation of questions for the new examination for second and third mates and assistant engineers.

(b) The number of questions submitted by each individual or association.

(c) The number of questions that were submitted and are still in use.

2. The Coast Guard's estimate of the cost of complying with the record-keeping requirements of Section 6 of the proposed Bill.

The information identified in item 1 above is provided as an enclosure.

In regard to the Coast Guard's estimate of the cost of complying with the record-keeping requirements of Section 6 of this Bill, I would like to preface my answer with some comments and recommendations to enhance the ability of the Coast Guard to comply and also to clarify the record with respect to which *licensed officers*, I believe, this Section of the Bill is intended.

As reflected in the testimony on 3 December 1975, the existing procedures that the Coast Guard employs to update a licensed officer's address are during periods of licensing transactions. A renewal of a license occurs every five years. Raises in grade and increases in scope of licenses may occur at any time. A licensed officer who has not permitted his license to expire will have an address listed with the Coast Guard, that is in most cases, current to within 5 years. The address of those officers who have not renewed their licenses will be materially out of date and of little value for the purpose of this bill. In addition, many of those records pertaining to individuals who have not maintained a current license, have been purged from the active files and sent to the Federal Records Center. Recovery of information from either the active Coast Guard files or those in the Federal Records Center would be by a manual process. The number of licenses involved is not precisely known but is estimated to be in the hundreds of thousands. The task of compiling this data under the present system would be monumental.

It is the Coast Guard's understanding that the intent of Section 6 of the proposed Bill is to require the Coast Guard to maintain a current list of qualified individuals that may be called upon to man our ocean-going merchant vessels in the event of a national emergency. If this assumption is correct, then these individuals should necessarily be holders, or recent holders, of current licenses authorizing service on oceangoing steam or motor vessels of any gross tons and unlimited horsepower.

Based on the above comments, I recommend that only those individuals who hold valid licenses be required to keep the Coast Guard informed of their current addresses. This should apply to Master, Mate, Chief Engineer and Assistant Engineer license holders authorized to serve on oceangoing steam or motor vessels on any gross tons and unlimited horsepower and could be implemented through Coast Guard regulatory action based on the authority provided in the bill.

Subsequently, if it is believed desirable to extend this requirement to those individuals who have severed ties with the Coast Guard by not renewing their licenses, I recommend including in the bill the following items:

1. Place the responsibility for keeping the Coast Guard informed of current addresses on the individuals;

2. Limit the requirement to those current and former Masters, Mates, Chief Engineers and Assistant Engineers who hold or held licenses which authorize service on oceangoing steam or motor vessels of any gross tons and unlimited horsepower;

3. Provide for the requirement to remain in effect until the individual reaches age 65 or 15 years after the last renewal, whichever occurs first. (This would allow for the retrieval system to be purged of records of those individuals who have not maintained sufficient association with the maritime field to be requalified under an intensive training program).

Should the above-mentioned recommendations be incorporated into the Bill, the Coast Guard could modify its present record-modernization plan to provide for the additional information. This plan was initiated in FY 1976 at an estimated cost of \$820,000. Presently, \$150,000 has been obligated for the project and if the remaining funds are made available, the system could be operational during FY 1979.

Sincerely,

O. W. SILER,

Admiral, U.S. Coast Guard, Commandant.

Enclosure: (1) Item Writers Data.

ITEM WRITERS

The following list of names and addresses identifies those individuals from the maritime community who participated in the formation of question and answers to be used in the Coast Guard's new multiple-choice examination for 2nd and 3rd Mate and 2nd and 3rd Assistant Engineer. Opposite each individual's name is a numeral which reflects the number of questions that he submitted. Also, included as an attachment are background information forms which were submitted by the individual at the time his services were contracted.

The item writers submitted a total of 1,183 Deck Examination questions and 3,324 Engineering Examination questions to the contractor, Educational Testing Services, Princeton, N.J. Included in these totals are (250) U.S. Coast Guard developed questions. The questions and answers were then reviewed for correctness and 3,168 of those items submitted were selected for use in the examinations.

Since the examinations have been in use, approximately 15% of the examination questions have been eliminated and replaced by other questions developed by Coast Guard personnel. The remaining 85% of the original questions submitted are still in use although most have been modified as problems areas were identified through a review analysis process.

1. John Bersen (167) (Eng), Calhoun MEBA Engineering School, 9 Light Street, Baltimore, Maryland 21202.
2. M. B. Billings (40) (Eng), Maine Maritime Academy, Castine, Maine 04421.
3. Edward F. Brown (20) (Eng), Maine Maritime Academy, Castine, Maine 14421.
4. Cary G. Byron (550) (Eng), C/O Gordon Byron, Middle Lake Road, DeRuyter, New York.
5. M. David Burghardt (115) (Eng), Massachusetts Maritime Academy, Buzzards Bay, Massachusetts.
6. Thomas Campbell (41) (Deck), Maine Maritime Academy, Castine, Maine 04421.
7. F. W. Creighton (21) (Eng), Maine Maritime Academy, Castine, Maine 04421.
8. G. D. Dunlap (159) (Deck), 316 Halsey Road, Annapolis, Maryland 21401.
9. Russell Erickson (136) (Eng), School of Marine Engineering, 672 Fourth Avenue, Brooklyn, New York 11232.
10. Jose Femenia (37) (Eng), 90-12 55th Avenue, Elmhurst, New York 11373.
11. John J. Foody (145) (Eng), State University of New York Maritime College, Ft. Schuyler, Bronx, New York 10465.
12. Edward Gras (45) (Deck), 275 Highland Road, N. Haledon, New Jersey 07508.
13. J. Hopkins (54) (Deck), 546 Equitable Building, 10 N. Calvert Street, Baltimore, Maryland 21202.
14. Roger M. Huhnke (38) (Deck), Director, Safety and Loss Prevention Moore-McCormack Lines, Incorporated, 23rd Street Terminal, Brooklyn, New York 11232.

15. George D. Kingsley, Jr. (80) (Eng), 48 Link Lane, Hicksville, New York 11801.
16. Norman D. Malone (300) (Eng), 25 Jackwill Rd., East Patchogue, New York.
17. Roger A. Marks (44) (Eng), Maine Maritime Academy, Castine, Maine 04421.
18. Ronald R. Osborne (46) (Deck), 7866 Americana Circle, Apt. T3, Glen Burnie, Maryland 21061.
19. Harold A. Parham, Jr. (28) (Deck), No. 1 Toni Cane, Yonkers, New York 10710.
20. Raymond Salley (134) (Eng), American President Lines, Pier 80, San Francisco, California 94107.
21. Donald E. Schwab (90) (Eng), 12 Nostrand Avenue, Wayne, New Jersey 07470.
22. Earnest C. M. Smedegaard (450) (Eng), 184 Manning Avenue, River Edge, N.J. 07661.
23. B. E. Smith (48) (Deck), 1290 Avenue of the Americas, New York, New York 10019.
24. Eugene Splinzola (20) (Eng), Maine Maritime Academy, Castine, Maine 04421.
25. Raymond Sutron (227) (Eng), School of Marine Engineering, 672 Fourth Avenue, Brooklyn, New York 11232.
26. Russell G. Terry (92) (Deck), Maine Maritime Academy, Castine, Maine 04421.
27. John Underhill (137) (Deck), 171 Topeg Drive, Severna Park, Maryland 21061.
28. Donald Van Wart (127) (Deck), SUNY Maritime College, Fort Schuyler, Bronx, New York 10465.
29. Bartholomew T. Walsh (550) (Eng), 424 Bowdoin Street, Dorchester, Mass. 02122.
30. Gordon M. Ward (16) (Eng), Calhoun MEBA Engineering School, 9 Light Street, Baltimore, Maryland 21202.
31. Robert B. Wells (120) (Eng), 10 Morris Lane, Great Neck, New York 11024.
32. Paul B. Wighstandley II (42) (Eng), Atlantic Richfield Company, Fort Mifflin Terminal, Foot of Island Road, Philadelphia, Pennsylvania.
33. L. A. Wolff (118) (Deck), 624 East Drive, Paramus, New Jersey 07652.
34. Jerry J. Williams (20) (Eng), 125 E 13th, Traverse City, Michigan 49684

Mrs. SULLIVAN. Admiral, are you saying that the statistical data which has been compiled to date, on the Coast Guard multiple-choice examination is really meaningless?

Admiral BENKIN. I think, and taking the long view, yes, I would say so.

I think that it is too short a time to really give it a fair appraisal. I do not think it is a fair appraisal of our new examination procedures, or for that matter, of the capabilities of the individuals who are involved in some of these statistics.

Mrs. SULLIVAN. Thank you, Admiral.

Thank you, Mr. Downing.

Mr. DOWNING. Mr. Leggett tells me he has to leave, and he would like to ask a question, and Mr. Emery, may we have your permission?

Mr. EMERY. I will defer.

Mr. DOWNING. Mr. Leggett?

Mr. LEGGETT. What the chairman has just observed is that the true and false type questions perhaps have limited utilization. We have found that, as an example, in our civil service qualification tests for Academy candidates, we make various judgments on the basis of those rather stereotyped kind of examinations, but we find really the whole-man approach dealing with many objective things, long-term grades, and things like that are much more important rather than the single testing procedures.

The Academies do not use those civil service tests at all for their qualification of applicants.

We have talked about the examinations given by the Coast Guard and the performance by various Academies, and the information I have on the academy in California is that for 1973, 32 deck and 28 engineers took the examination. They all passed.

For 1974, 28 and 26 respectively, took the examination and they all passed except maybe 1.

For 1975, 35 and 23 respectively, took the examination, and they all passed. I think that brings up the question that in this chart that has been provided to us we have the results of the preliminary examination, and it is actually the final examination, where we retest them, that gives us the complete result as to whether or not the candidates qualify; is that not so?

Admiral BENKERR. Yes, sir, that is true. That if you look at the statistics in terms of determining an overall passing or failure you must look at not only the initial examination, but a reexamination result, also.

Mr. LEGGETT. There does appear to be some kind of a pattern that some of the schools have done better than others on these tests, which might have to do with something they emphasize, or do not emphasize, in their curriculum.

In California we are attempting to expand our school, diversify our curriculum, and achieve a full and complete accreditation and insofar as that is concerned, we changed the faculty and we do not train them necessarily to pass the examination.

I am chairman of the Subcommittee on Fisheries and Wildlife Conservation and the Environment of the Full Committee. We are concerned with getting sufficient Coast Guard personnel to assist in expanding our monitoring capability for the 200-mile limit bill, which hopefully will be enacted sometime next year, and written into law.

There appears to be vast fields that we need to prepare for, rather than simply managing a diminishing merchant marine capability that we have.

I think we have to keep in mind that the military academies require an estimated expenditure of about \$100,000 for the total curriculum for 4 years of each student.

We have a dropout rate of about 35 percent at most of the academies, so you have to add about 35 percent to that figure, which gives you about \$130,000 per man in cost to graduate from the established military academies.

For the current 3-year curriculum, with the \$600 contribution that is made for maritime cadets, our total investment is about \$1,800 per man during that 3-year time period.

It seems vastly disparate for the results that we get, because I know that many times the cadets we get out of the State academies and Kings Point are equally as good as any others in the system.

I would also like to observe I am a coauthor of this bill, Mr. Chairman, and we do set a barometer on page 4 of apportioning the deficiency which is geared to the year 1975, and in California we have been attempting to respond to the ad hoc committee's recommendations to broaden our curriculum, and gain accreditation, so we are in the process of beefing up the school, and broadening which does necessarily relate to increasing the total enrollment.

If you take it at 1975, we get short sheeted. It would be better if we pegged it a couple of years down the line, and then I think we would be relating to a curriculum more in line as recommended by the ad hoc committee for standing in the academic community.

Mr. Chairman, I do have to go to a conference now.

Mr. DOWNING. Thank you very much, Mr. Leggett.

Mr. Emery?

Mr. EMERY. Thank you very much, Mr. Chairman.

Admiral, I am a graduate electronics engineer, and I would like to talk just a few minutes about general experiences that I have seen in the 4 years I studied engineering in college, and that was very simply that you could not always determine who the most capable engineer was going to be by the grades received on exams.

In fact, I knew of many occasions where some of my classmates would get 95, and even 100 on the final exams, or intermediate exams, because they were very good at memorizing things, and were very easy to teach mathematics, and many other things, and they would get excellent grades. However, when the instructor said go off to the laboratory and build it, they were totally lost. This is because they did not have the grasp of practical application of some of the things they had learned.

Very often those that knew the most about electronics were those that might get C's and B's, and sometimes even D's on the examinations, but they had a grasp of what they were doing, and could mix a certain amount of commonsense and practicality in with the book learning.

Do you feel that some of the examinations or some of the testing methods that are used at the maritime academies adequately measure the ability of individual students to grasp concepts in a practical way, rather than merely learn from instructors or some books? Obviously you have to separate the question.

Admiral BENKERT. Well, I feel, sir, that we would probably be well advised to ask some of the representatives of the schools themselves the question, but if I may say so, from the Coast Guard's point of view we find that the individuals that come out of the various schools and, of course, it is somewhat perhaps difficult to make a generalization, but we find that the graduates of the schools, they come to us for an initial examination, let us say, and that is really the first time that we see these individuals.

We do partake with the various academies in discussing their curriculum in conjunction with the Maritime Administration. We do quite a bit of work in connection with their programs, Mr. Emery.

I feel myself that the graduates of these academies come to us for this initial examination, and for a future, if you will, in the marine industry, at least somewhere, whether it be at sea, or in some other part of the industry, and that they are, generally speaking, very well prepared.

We feel that over the years we have had some very fine individuals come out of the schools who are prepared to attack the practical problems of operating vessels, and operating in the marine industry.

Mr. EMERY. Do your testing procedures adequately measure the competence of those wishing to be ship's officers?

Admiral BENKERT. I do not think any examination procedure really measures what an individual is going to do after he has taken the

examination. I feel that we can determine whether the man is professionally adequate, and hopefully, competent to perform a specific job criteria, which is really what it is our province is to do, in giving examinations, that is. But how the individual will make out as far as a shipboard officer is concerned, or in some other walk of life, I do not think that the examination process really answers this question in any walk of life.

I would say this, though, and I think I really am quite well familiar with this. We have in the Coast Guard taken into our active service a number of graduates of Kings Point, of the various State maritime academies, and as individuals generally across the board, our experience with them as junior officers, and then as regular officers, staying in the Coast Guard, has been extremely good, sir. We think they produce a good product.

Whether our examination is a forerunner of this or not, I really cannot say, except that we can hopefully determine whether the man is professionally competent to do a specific job he is examined for.

Mr. EMERY. Generally speaking, from your experience, the Coast Guard would agree that the graduate at Kings Point and the various academies were professionally competent?

Admiral BENKERT. Yes, sir.

Mr. EMERY. Following up the comments made a few minutes ago, do you have any way of testing a man's ability to operate under pressure in a real life situation? You can test the man's basic knowledge and you can test the man's skills, but is there any way you can measure physical or mental problems he might have, or his ability to operate under stress in an emergency situation. Or is that, in your opinion, something that only comes from experience, and you can only measure from experience there?

Admiral BENKERT. That is a very difficult thing to examine an individual for, sir, and I do not really think our examination as such would encompass this.

I certainly do think that the time the individual spends, particularly, and speaking of the State maritime academies, and at Kings Point and, if you will, the individuals who come to us for examination for a licensed officer capacity from the fo'c'sle, that they have had a good going over in the process, before they come to us for examination, and perhaps have been somewhat weeded out by that process, sir.

Mr. EMERY. This is a function of training and discipline, as much as anything else, to operate under pressure, and that comes from experience, and on the job.

Admiral BENKERT. And in this case someone who has had the practical and educational background that they have had in the institutions, yes, sir.

Mr. EMERY. Thank you very much, Mr. Downing.

Mr. DOWNING. Thank you, Mr. Emery.

Admiral. I notice in the second paragraph of your statement you defer to the Commerce Department with respect to sections 2, 3, and 5 of H.R. 10413.

In view of the relative importance of these sections, would you be able to give the subcommittee the benefit of your personal views concerning these provisions?

Admiral BENKERT. Yes, sir, I can.

I think myself that the statement of intent of the Congress, which is contained in section 2 of the bill, that the Merchant Marine Academies and that the State Maritime Academies continue to perform this professionally oriented education and training function.

I am a firm supporter of that, personally, yes, I think in regard to section 3, if I recall, and if I may refer to this, Mr. Chairman—may I, Mr. Chairman?

Mr. DOWNING. Yes, please do.

Admiral BENNETT. In section 3, I think my personal appraisal of this was simply this sounded like a very good idea. I think that is the best I can offer, Mr. Chairman.

How to achieve these goals, again I think this probably should be deferred to the various academies and to the Department of Commerce, but since you asked my personal opinion, I must say that I feel, as I think as I have stated before, that the products that are produced by Kings Point and by the State maritime academies are, in general, and in every case that I know of, extremely fine young men who are professionally competent.

We get a number of them that we deal with directly in the Coast Guard, and through, as you know, our extensive association with the functioning of the marine industry across the board.

I feel this is well worthy of support, sir.

Mr. DOWNING. In view of a declining merchant marine, which I hope we will be able to reverse, in your opinion, are we training too many men or people for the maritime industry?

Admiral BENNETT. Well, I must again give you a personal opinion, sir, but I feel that a larger number of the young men who are coming out of the various training academies today, perhaps they may not all be going to sea, and I think there are other witnesses who discussed this to a large extent, but I do think that first of all that our ocean-going merchant marine may well have decreased some in the number of jobs that are available to individuals.

On the other hand, our inland marine industry has expanded tremendously in the last 10 years.

To my knowledge, a large number of the graduates of the various training institutions now are going to sea in the marine inland industry.

I personally feel that the background and education that these individuals get are a great gain to the marine industry across the board, not just looking at the man who is going to sea as a third mate, or third assistant engineer, perhaps on an oceangoing vessel, out of the academies.

There are associated walks of life where this training and experience is of inestimable value, and is good for the industry as a whole, sir.

Mr. DOWNING. Well, if I understand your answer, it is that we are not training too many people at this time.

Admiral BENNETT. Well, in terms of pure numbers, sir, I am not that well acquainted with what every individual does, or how he fits, but it seems to me that I think the programs are good.

These programs produce excellent products, and I think really somebody else perhaps should say numberwise that we have too many or too little.

Mr. Chairman, I think that the programs are good, and the people that I know that are in the marine industry who hire these young men invariably are pleased with the product that they get.

Mr. DOWNING. Admiral, what is your estimate of the cost of complying with the recordkeeping requirements of section 6 of the bill?

Admiral BENKERT. We have done a little work on this, sir, and I am sorry at this time I cannot give you a figure, but we will be able to give you something for the record, sir.

Mr. DOWNING. I would appreciate that.

Mrs. SULLIVAN. Would the chairman yield?

Mr. DOWNING. Be glad to.

Mrs. SULLIVAN. I am not certain, and I would like to ask the counsel, in the present law, or in what we are attempting to do, is there a requirement of the graduate to keep either the Coast Guard who does the licensing, or the academy from which they graduate acquainted with their location, where they are, and what they are doing?

Miss McDONNELL. It was our understanding, Madam Chairman, from the admiral's testimony last November, that is not the case at the present time, and that is the intention of section 6 of the bill.

Mrs. SULLIVAN. We must put some requirement on the graduate, must we not, to keep either the academy or the Coast Guard informed periodically, so that you do not have to go out and hunt the individual up, but you are informed every so many years of where they are, and if they are still on the list, or still in the Reserves?

Admiral BENKERT. From the Coast Guard's point of view, Madam Chairman, the information that we get is solely, at the present time, when a man comes in to us for an original license, or for a renewal of his license and this, of course, is at least at 5-year intervals, he gives us his address, and location, and so on.

During the intermediate time the only individuals that we have any handle on as far as location is concerned are the people who sign on shipping articles who actually sail, and where the individual does indicate his address, next of kin, and so forth in this process.

As far as recordkeeping system of these individuals, it is nonexistent, and not required.

Mrs. SULLIVAN. Is there not a card system on each individual with his license?

Admiral BENKERT. That is what we have at the present time.

Mrs. SULLIVAN. So it can constantly be updated as they either acquire a license, or ask for a renewal?

Admiral BENKERT. If the man comes in for a renewal, then we get an updated card on him, yes, Ma'am.

An individual, for example, and some of them have, over the years, let their license lapse, since the last time we saw that individual for the issuance of a license we have no handle on him at all, no, Ma'am.

Mrs. SULLIVAN. Then if there was need to recruit officers for the merchant marine fleet in any way, it would be difficult to locate those who have not tried to renew, or have just dropped out.

Admiral BENKERT. Yes, Ma'am.

Mrs. SULLIVAN. I think this is the one reason we were asking to have some updated statistics, because I do not know what requirements of the Reserve are.

I do not know to whom the reservists in the merchant marine would keep in contact with. Maybe the State academies can tell us later. I think this was the whole gist of it, that when we took ships out of mothballs in the Vietnam affair, and I think back in the Korean days, too, it was difficult to locate anybody who had the advantage of a merchant marine education who was not keeping up with his license, to try to get those kinds of people who had been educated to be aboard the ships.

Admiral BENKERT. I think really the best way of location at the present time for individuals, those who maintain an active presence, is a labor organization who would have a handle on this.

Mrs. SULLIVAN. I am sure they would have records of those.

Admiral BENKERT. Yes, ma'am. Those who are Reserve officers either in the Navy or Coast Guard, you would have some kind of information on them, as to address, but it might not be particularly updated at that time.

Mrs. SULLIVAN. Well, for the benefit of those who will be at the witness table later, I think this is really the question that came up during the investigation and the study of the academies—how do we know, and how do we have the ability, or does anyone have the ability, to contact those who have enrolled and graduated from the academies for some future need?

I do not know whether the legislation as prepared is going to really give us that information from the requirements we have written in.

Admiral BENKERT. Just a quick appraisal of the legislation, I do not think it will produce exactly what you are asking for.

Mrs. SULLIVAN. The only thing that you will be doing in the Coast Guard is keeping an accurate account of all those whose licenses are in effect.

Admiral BENKERT. Yes, ma'am, basically.

Mrs. SULLIVAN. If they drop out after 5 years, and have not renewed it, you would have no record?

Admiral BENKERT. If they did not renew a license, the address we would have on them would be just that ancient; yes, ma'am.

Mrs. SULLIVAN. All right.

I might think of something else later on, Mr. Chairman.

Mr. DOWNING. Admiral, could not the Coast Guard develop a plan to accomplish this without the need for legislation?

Admiral BENKERT. Well, we would be glad to take a look at it, Mr. Chairman.

I have not really, to be honest with you, I have not thought about developing a plan specifically for this purpose. I think it would present us with some difficulties, because we just do not have that kind of a handle on the people.

Mrs. SULLIVAN. When we made this request to the Coast Guard to give us information, I forget now, but counsel may refresh my memory, they said it would be almost an impossible job to give us anything that was accurate, and it would be a voluminous task to try to check through and find out. They would have to go through records that were filed away.

Admiral BENKERT. Yes, ma'am.

Mrs. SULLIVAN. I do not know how you keep your records, but having some knowledge of training people in the schools, and placing

them out on jobs. I must have had access to some 25,000 or 30,000 cards over a period of a few years, and those cards were never thrown away. Every so often we would attempt to get in touch with the individuals.

Now, I do not know the expense of doing such a thing. What is your present status if they have not renewed licenses, or if they have dropped out?

Now, this may not be the duty of the Coast Guard, except that they do the licensing.

Admiral BENKERT. Yes, ma'am.

Mrs. SULLIVAN. And some way there ought to be somewhere these things could be available outside of the union files, where the members would belong to certain unions.

Mr. DOWNING. Admiral, counsel has directed my attention to section 6 of the bill which reads:

The Secretary of the Department in which the Coast Guard is operating shall take such action as may be necessary and appropriate to compile, and thereafter keep current, a roster of the names and addresses of all individuals who have not attained the age of 65 years and are, or at any time were, licensed officers in the U.S. merchant marine, in order that the location of such individuals be readily available in the event of any national emergency.

You are going to have to do it if this bill passes.

Admiral BENKERT. Yes, sir; except that under our system, and I understand what you are saying, and you are right, but it is not exactly clear to us, but in any event under our system of licensing of individuals, as we read the law, it says to keep current a roster of the names and addresses of all individuals who are, or at any time were licensed officers in the merchant marine.

If by "keeping current" you mean something to a more specific degree than the last time we had a license transaction with an individual, as we have said in here, we think it is a good idea, but we will have a big problem in trying to comply with this.

Mr. Chairman, we will have to develop some kind of a system in order to do this, because our associations with the individual at the present time are really generally, solely at the time of his application for either an original license and upgrade of license or a renewal of the license.

For example, a man who got a license, we will say, during World War II, and never renewed it, this, as I read it, is if the man had not reached age 65, we would be required to find that individual's address, and keep a current roster of him and his whereabouts in case he was needed.

We find this to be very difficult, and we have not determined just how we will go about this at the present time, sir.

Mr. DOWNING. Well, I think that is the intent of the proposed legislation.

It seems to me you should be able to go through a computer and find out immediately where the available personnel are.

Now, how you accomplish that is going to be your awesome task.

Mrs. SULLIVAN. Mr. Chairman, I would just ask how many graduates come out of the State and Federal academies, and I see the combined total here in this report from January 1975 to October 1975 is 419 licensed.

I do not know how many graduates there are, but there cannot be so many that it would be a tremendous job year by year.

Admiral BENKERT. Well, the way the law is written, Mrs. Sullivan, it does not cover just officers who have been licensed upon graduation from one of the academies. This covers, to my mind, a very vast gamut of licensed personnel.

As you know, we have licensed motorboat operators, licensed ocean operators, licensed towboat operators. These are all licensed personnel, and this is many thousands of people, not just those who are graduates of the schools, plus, of course, the people who have obtained licenses from working their way up from the fo'c'sle.

We are talking about many, many thousands of people here, Madam Chairman.

Mrs. SULLIVAN. I realize that there are many, and I hope it continues that men who were not able to go to any academy, but learn through the school of hard knocks and experience will finally make their way to the top, and should be promoted, and would not be on the roster of any who graduated from the academies, State or Federal.

I think this is the thing that we have got to review. We asked for a report to come back to the Congress, and I think these are the things we need for some complete information on what are our needs, how do we supply them in case of emergency, how do we get to them?

I do not know anyone who is going to have that responsibility but the Coast Guard.

Admiral BENKERT. If I might ask a question, Mrs. Sullivan. May I?

Mrs. SULLIVAN. Yes.

Admiral BENKERT. In this section 6, are you anticipating statistics, and information, as it says, on all licensed officers of the merchant marine, or would this be open to some discussion as to the specifics that you desire?

As I say, in the term licensed officers of the U.S. merchant marine, it covers a very wide gamut of personnel far in excess of the numbers that you are talking about being graduates of the academies.

Mr. DOWNING. I think the intent of the legislation is to include all licensed officers.

Mrs. SULLIVAN. That is what I was going to say, Mr. Chairman. After all, you give licenses whether they have graduated or not.

Admiral BENKERT. Yes, ma'am.

Mrs. SULLIVAN. So it should then include all who have ever applied.

Admiral BENKERT. We have many, many categories of licenses, as I am sure you are aware.

Mrs. SULLIVAN. But the main thing that we need for our information, for the academies in the future is what happens to these individuals, because the people, that is the taxpayers, have more of a responsibility to these, because Federal money is used in the Maritime Academy, as well as the State academies. This is the one thing that is necessary, certainly, for emergency and there must be some way worked out that the roster is as complete as possible.

Mr. DOWNING. Admiral, do you believe the existing institutions in this country which prepare individuals for initial licensing as merchant marine officers provide adequate training in the so-called critical skill areas, and what specifically are these areas?

Admiral BENKERT. Well, I feel, sir, that the various institutions that prepare individuals to take our examinations for licenses do provide a good basic background and capability of the individuals.

I do think that as they progress, once they are licensed officers, for example, and serve on different types of vessels, more sophisticated types of installations that we have today, that there may well be a need for some retraining and upgrading of the individuals.

I think we have appreciated this, both the Maritime Administration and ourselves. We entered into an agreement around a year or more ago with the Maritime Administration, looking toward an appraisal of just this point, Mr. Chairman.

We are working very closely with the Maritime Administration exactly in this field. For example, in the category of radar observer training, in the category of firefighting capability, we have developed some mutual approaches to this to provide further training, for individuals in specific areas.

In our license upgrading program, for example, we are looking now at the possibility of additional requirements for license renewals, in other words, some kind of additional training for individuals predicated on requirements that we might feel are appropriate to qualify an individual to be advanced over and above the straight type of examination process that we now have.

I think that basically the individuals that come out of the schools are well trained, are capable, and are professionally competent for what they are sitting as a license for, and in particular, a third mate or third assistant engineer. They are just starting in the trade.

Mr. DOWNING. What percentage of the graduates of the Federal, State, and industry sit for the Coast Guard's initial licensing examination, and must a student apply to take the exam immediately upon graduation? If not, how long is he eligible to sit for the examination?

Admiral BENKERT. I cannot give you a specific figure on the graduate, sir. Perhaps the schools might be better able to answer that.

I do know that there are a number of graduates of the various schools, State schools in particular, and I am not sure, but I think Kings Point also who, for example, are foreign students who do not sit for our license examinations.

I cannot give you a percentage, but I know that the vast majority of them, sir; do sit for our licenses.

Mr. DOWNING. My next question is, you state in your prepared statement that, and this is on page 3, this system will be operational by fiscal year 1979.

Now, that seems to be an unduly long time to implement this program. Do you not think that that can be hastened a little bit?

Admiral BENKERT. Yes, sir; I think it could, if we got the money for it.

I think what we are trying to say there is that we are modernizing our recordkeeping facilities, sir.

Mr. Chairman, we have started this program with a budgetary allotment of so much hopefully per year on a continuing basis, and we do hope that, as I said in the statement, that by 1979, giving us about 3 years, that we would have a system whereby we could readily provide the information that you asked for in section 6, as we have said, current to within 5 years for personnel who had continued in the licensing program.

I think our problem here, Mr. Chairman, is in line with what you said a few moments ago, that if you are aiming at people who have

not continued in the licensing program, we have a bear by the tail here, because the only handle that we have now on the people, of course, is through their license transactions.

Mr. DOWNING. Well, Social Security knows where everybody is at any given time.

Perhaps, Admiral, you can go over and ask them how to do it.

Admiral BENKERT. Yes, sir; that is a good idea, except I just got a lecture yesterday on the Freedom of Information and Privacy Act conflicts, which might present us with some problems at least our lawyers tell us, Mr. Chairman.

Mr. DOWNEY. Yes; I know.

Any further questions of these witnesses?

Well, thank you very much, gentlemen. You have made a significant contribution, and we appreciate it.

Admiral BENKERT. Thank you very much for having us, sir.

Mr. DOWNING. Our next witness is Rear Admiral Sheldon Kinney, president, State University of New York Maritime College who will speak in behalf of the superintendents of the State maritime academies.

Perhaps all of the superintendents would like to come up to the witness table with Admiral Kinney.

Admiral, will you identify the gentlemen for the record?

STATEMENT OF REAR ADM. SHELDON KINNEY, PRESIDENT, STATE UNIVERSITY OF NEW YORK MARITIME COLLEGE, APPEARING ON BEHALF OF THE SUPERINTENDENTS OF THE STATE MARITIME ACADEMIES, ACCOMPANIED BY REAR ADM. JOSEPH RIZZA, SUPERINTENDENT, CALIFORNIA MARITIME ACADEMY; GEORGE RECTOR, DIRECTOR, GREAT LAKES MARITIME ACADEMY; REAR ADM. E. A. RODGERS, SUPERINTENDENT, MAINE MARITIME ACADEMY; REAR ADM. LEE HARRINGTON, PRESIDENT, MASSACHUSETTS MARITIME ACADEMY

Admiral KINNEY. Mr. Chairman, members of the subcommittee. Mrs. Sullivan, we are particularly glad that you are here today. Your interest in maritime education and training and the formation of the Ad Hoc Committee on Maritime Education and has been a particularly fine thing.

We would also like to congratulate you upon your receipt of the Robert L. Hague Merchant Marine Post, American Legion Trophy recently.

The ad hoc committee you formed has done the most comprehensive job.

Mrs. SULLIVAN. Thank you. All of those things are good to hear.

Mr. DOWNING. Admiral Kinney, before you begin, I would like to place into the record at this point a letter addressed to me from Rear Admiral J. R. Rizza, dated December 2, 1975, enclosing an exception to the joint statement of the academy superintendents that applies only to the California Maritime Academy because of its transition phase from a 3- to 4-year school.

Without objection that letter will appear in the record at this point.

[The letter referred to follows:]

CALIFORNIA MARITIME ACADEMY,
Vallejo, Ca., December 2, 1975.

Hon. THOMAS N. DOWNING,
Chairman, Subcommittee on Merchant Marine, U.S. House of Representatives,
Longworth House Office Building, Washington, D.C.

DEAR MR. DOWNING: Thank you for your kind invitation to appear as a witness at 10:00 a.m. on December 3, 1975, on the hearings before your Subcommittee regarding H.R. 1626, H.R. 9864, H.R. 10413, together with an identical bill H.R. 10500.

Attached hereto is an exception to the joint statement of the academy superintendents that applies only to the California Maritime Academy because of its transition phase from a three to a four year school.

Sincerely,

J. P. RIZZA,
Rear Admiral, USMS, President.

Attachment.

Section 4(c) of the proposed bill states: "If the amount of funds, authorized and appropriated by the Congress for use in accordance with the provisions of this section, in any fiscal year, is not sufficient to provide payments to all students eligible under subsection (a), then the Secretary shall apportion the authorized and appropriated funds among the academies and colleges with which he contracted under section 4 of this Act in direct proportion to the total enrollment of each such academy or college at the end of the 1975 academic year."

Since each Academy has a unique problem with respect to enrollments and subsistence payments, this is not a subject on which we can make a common statement. We would like to submit for the record, Mr. Chairman, the position of each of the six Academies with respect to the limitation as it affects that Academy."

In the event that section 4(c) remains in the proposed bill unchanged an exception should be made in the case of the California Maritime Academy. The California Maritime Academy is currently in transition from a three to a four year school. The current freshman and sophomore classes are enrolled in the four year program. The senior class to graduate in June will be the last class under the three year program. There is no junior class at present. The four classes in the four year program will be fully enrolled by 1977-78. If restrictions imposed by section 4(c) become effective at the end of the 1975 academic year, the academy program will be seriously crippled or negated since the full four year enrollment has not been achieved due to the transition status.

Therefore it is recommended that section 4(c) be amended to state that the Secretary shall apportion the authorized and appropriated funds among the academies and colleges in direct proportion to the total enrollment in each such academy at the end of the 1975 academic year except in the case of the California Maritime Academy, in this case the total enrollment should be considered at the end of the 1978 academic year or at the planned enrollment of 468 students.

Mr. DOWNING. Admiral Kinney, you may proceed in your own fashion.

Admiral KINNEY. Mr. Chairman and members of the subcommittee, the State maritime academies appreciate this opportunity to appear before you and present our views on H.R. 1626 and H.R. 9864, bills to amend the Maritime Academy Act of 1958 (Public Law 85-672) to increase the USMS cadet subsistence payment from \$600 to \$1,200 per year at the State maritime academies, and H.R. 10413 and H.R. 10500, designed to implement recommendations of the report of the Ad Hoc Committee on Maritime Education and Training.

Present before you today are Rear Adm. Joseph Rizza, superintendent, California Maritime Academy; Mr. George Rector, director, Great Lakes Maritime Academy; Rear Adm. E. A. Rodgers, superintendent, Maine Maritime Academy; Rear Adm. Lee Harrington, president Massachusetts Maritime Academy; Rear Adm. John Smith, superintendent of the Texas Maritime Academy was unable to attend today, and he asked that we represent his school as well.

I am Rear Adm. Sheldon Kinney, president, State University of New York Maritime College at Fort Schuyler.

The Maritime Academy Act of 1958 gave substance to the concept of a partnership between the State academies and the Federal Government for the attainment of an important national objective: The training of a suitably large body of skilled maritime officers for service on American ships who are also trained in naval sciences so that the merchant marine is capable of serving as a naval auxiliary in time of war and national emergency, as specifically stated by Congress in its Declaration of Policy (title I, Merchant Marine Act of 1936), section 6(a) of the Maritime Academy Act authorized the Secretary of Commerce to make subsistence payments to cadets at "a rate not in excess of \$600 per academic year per student." This section further stipulates that such payments "shall be used to defray the cost of uniforms, books, and subsistence"—17 years ago, \$600 per year was an adequate allowance. Obviously, this is no longer true.

The Ad Hoc Committee on Maritime Education and Training appointed by Chairman Leonor Sullivan, carefully examined the costs borne by the U.S. maritime service cadets enrolled in the State academies, and recommended that the allowance be increased from \$600 per year to \$1,200 per year. We ask that you give recognition to this in acting on the bills under consideration today, all of which incorporate the provision. Certain specific aspects of the case for increased financial aid for these students are pertinent.

1. The allowance is to defray the cost of uniform, books, and subsistence; \$50 per month obviously does not, in 1975, approach this. In addition to paying for college tuition fees, textbooks, equipment, room and board, they must pay for uniforms not required of college students preparing for other professions.

2. Since they go to sea in the training ships between academic terms, they do not have the same opportunity to earn money in the summer toward the following year's expenses, that other college students do.

3. The regimented daily routine at the academies and requirements to live aboard make part-time employment next to impossible.

4. Like their counterparts in the Federal Merchant Marine Academy, they take the naval science curriculum leading to qualification for a commission in the U.S. Naval Reserve as an ensign, and must accept that commission if tendered.

It should be noted that increasing the subsistence allowance does not in itself increase the total number of subsidized cadets, since that number is regulated by the Maritime Administration.

We would urge the committee, however to also adopt some formula or device to provide automatic adjustment of the subsistence allowance which recognizes changing economic conditions, to eliminate the need for specific legislation when adjustment is appropriate. One way would be to parallel the ROTC stipend, which is presently \$100 per month, having been raised from \$50 per month by the 92d Congress.

Turning now to H.R. 10413 and H.R. 10500, these identical bills, we understand, are designed to implement the recommendations of the report of the Ad Hoc Committee on Maritime Education and Training. The State academies appreciated the onsite visits by Congressman Fred Rooney and the members of the committee and wishes to recognize the comprehensive data and information accumulated by the

committee. The focus which this intensive study gave to the important function of education and training for the Nation's merchant marine is significant.

The maritime academies obviously support the statement of congressional intent, as set forth in section 2 of the bill, that they among other sources should continue to educate and train individuals for initial licensing as merchant marine officers. Formal education and training for our Nation's merchant marine had its origin in the State academy system, when the first school ship commenced this function 100 years ago. Prior to that time there had been no formal training for our merchant marine. Today the State academies provide annually the majority of officers licensed for the U.S. merchant marine.

The State academies take strong exception, however, to the concept that union schools are more able to fulfill short-term emergency requirements for licensed merchant marine officers, than are the Kings Point and the State maritime academies.

In both World War I and World War II the State academies responded to emergency needs in a fashion that is history. During the rapid expansion for Vietnam they responded to a one-time request and graduated accelerated classes. Further acceleration of classes or inception of short-term programs were not considered necessary by the Maritime Administration.

To restrict emergency requirements to union schools is to diminish rather than provide flexibility. The language of this section could unnecessarily limit the significant contributions which the State academies and the Federal Academy can and would provide in any future period of national emergency. To fail to utilize the capabilities of these resources would be a national waste of significant proportion. We strongly recommend the elimination of any concept that expansion would be limited to union schools, particularly since they do not have a capability for training in the naval sciences.

Section 3 mandates meetings between the Department of Commerce and representatives of the several sources of licensed officers to estimate enrollment for 4 fiscal years. At present the State maritime academies meet annually with the Maritime Administration—most recently on November 20, 1975—and it is recommended that these meetings continue.

Do you believe that the merchant marine officer requirements can be predicted 4 years in advance with sufficient accuracy to be the basis for inputs? To limit inputs based on an annual guess would have serious cyclical effects on 4-year programs.

In 1965 MARAD predicted a continuing need for the output of all maritime officer licensing programs, with a growing need during the decade ahead as a rebuilding of the World War II merchant marine and the retirement of officers under the new 20-year plan were forecast.

The State academies were encouraged to expand to meet this growing need. In 1970 a new MARAD study predicted an oversupply of officers, and in 1971 the Maritime Administration reduced the numbers of cadet subsidies to each academy back to the 1965 level.

Ironically, during this same year the Congress passed the Merchant Marine Act of 1970 with a provision to fund from the Federal Treasury through the operating differential subsidy formula, the perpetuation of the union schools. This obviously encouraged this addi-

tional source of officers at a time when there was absolutely no need to do so.

In 1974, a new study forecast a shortage of licensed officers in the late 1970's and encouraged the use of union schools to respond to future emergency needs. It should be noted that the minimum time required for an initial license is 3 years. In the case of men "coming through the hawsepipe" the source has changed significantly during the past few years.

It may not be possible to find adequate numbers of these individuals for short time emergency requirements. Maritime union retirement plans, technical advances, reduced numbers, and new type examinations, all tend to reduce the numbers of unlicensed seamen who will be available for emergency type programs.

Furthermore, the all volunteer Armed Forces have reduced the pool of sea experienced personnel available from these programs.

Finally, we must recognize the nonunion operators that make up a significant part of our merchant marine. They should not be forced into relying on a union-controlled source of officers to meet their needs during an emergency.

The growing tug and offshore industry, combined with the new Coast Guard licensing requirements must be taken into consideration when looking at training programs. Increasing numbers of graduates are being recruited for this seagoing part of our merchant marine, though some is inland.

Economic factors change conditions rapidly. inflation and recession have created conditions whereby older officers are not retiring as predicted, and young officers desiring to go ashore cannot find jobs, so the turnover rate is down. When economic times improve we can expect a much higher turnover rate.

Section 4(1) would specifically provide that the training ships be manned in accordance with standards prescribed by the Coast Guard. To the best of our knowledge this is presently the case, and we certainly would have no objection to this provision.

Section 4(2) would increase the cadet subsistence from \$600 to \$1,200, and as previously stated, we believe that the cadets fully merit this. It must be remembered that this is aid direct to the cadets and not to the schools; there is no surcharge or overhead. The cadets need it.

Section 4(c) states:

If the amount of funds authorized and appropriated by the Congress for use in accordance with the provisions of this section, in any fiscal year is not sufficient to provide payments to all students eligible under subsection (a), then the Secretary shall apportion the authorized and appropriated funds among the academies and colleges with which he contracted under section 4 of this Act in direct proportion to the total enrollment of each such academy or college at the end of the 1975 academic year.

Since each academy has a unique problem with respect to enrollments and subsistence payments, this is not a subject on which we can make a common statement. We would like to submit for the record, Mr. Chairman, the separate positions of the academies with respect to the limitation.

Section 5 of the bill would extend to the State maritime academies the resources and programs of the National Maritime Research Center. We fully support this.

Section 6 of the bill would provide for the Coast Guard to compile and maintain a roster of the names and addresses of individuals less than 65 years of age who are licensed as officers of the U.S. merchant marine. We concur that this is desirable.

The provisions of section 7 relate to a more stringent examination for renewal of merchant marine officer license. The concept is highly desirable for both deck and engine officers. In addition to a demonstrated capacity for professional qualification, we would urge that realistic physical standards be established and enforced to ensure the manning of the merchant marine by persons physically competent to safeguard the safety of American vessels and their personnel.

In addition to the above comments that relate specifically to H.R. 10413, we would like to invite your attention to certain facts and background information that should be considered by the Committee.

The education of a trained ships' officer is an expensive procedure. The at-sea training of graduates of programs at the Federal Academy, Michigan State and the MEBA Calhoun School is conducted aboard commercial vessels at no cost to the school, and in most cases, the cost of the ship operation is highly subsidized by the taxpayers.

In the case of California, Texas, New York, Massachusetts, and Maine our respective States bear the operating cost which now exceeds three quarters of a million dollars per year. These costs include fuel oil, crew wages, insurance, pilots, tugs, port fees, school pier facilities, and ship's consumables, as well as the heat, water, and electricity while the ship is berthed at the school. This has become too much of a burden for these States to bear and budget restraints are forcing severe compromises in our training ship operations.

As stated earlier, the Maritime Academy Act of 1958 gave substance to the concept of a partnership between the State academies and the Federal Government. In keeping with this partnership, it is imperative that the Federal Government do its share to compensate for the affects of inflation and to insure the quality of at-sea training.

We urge as a matter of highest priority that the Congress amend the bills before this committee to authorize the Maritime Administration to provide the fuel oil for our training ships in much the same manner as major ship maintenance is now authorized by the Maritime Academy Act of 1958.

Failure of the Federal Government to support the State academies' cadet subsidy increase at this time could only be interpreted by State officials in a way that would most assuredly place these academies in jeopardy as our States are attempting to curtail programs and reduce budgets.

We should mention that if the State academy system fails, it would greatly increase the overall training cost to the Government to expand the other systems of training. Without the training ships there are not enough cadet spaces aboard commercial ships to provide the necessary at-sea training.

With regard to training to meet emergency needs, it is unfair to assume that there will be a sufficient pool of sea-experienced personnel — unlicensed seamen, ex-Navy and Coast Guard — to train through short periods of courses as has been accomplished in the past to meet emergencies.

We believe that the reduced number of operating ships, the reduced crew size on new ships, the various retirement plans, and the volunteer

Armed Forces, combine to drastically reduce the number of individuals who might be available to respond to such a future emergency program.

We therefore urge a more thorough study of the proposed plan to meet future emergency needs. Furthermore, it should be kept in mind that the State academies could immediately respond to an emergency by utilizing the training ships for housing and our fine training facilities that presently have the potential for greater utilization.

Finally, H.R. 10413 does not address itself to a most serious problem—employment opportunities aboard ships under contract with the major unions. The most serious situation is with the MEBA district 1. By manipulating seniority rules this union places graduates of the Calhoun School in group two, and graduates of Kings Point and the State academies in group four, and group four applicants are effectively blocked from joining the union.

Therefore, all academy engineering graduates are effectively blocked from obtaining employment aboard a very large segment of our merchant vessels. This procedure, together with the proposed controls set forth in sections 2 and 3 of H.R. 10413, and the freedom and actual encouragement to expand facilities in order to prepare for emergencies, enables this union to continue this practice of denying employment opportunities to academy engineering graduates.

Although we question some union hiring practices, our graduates are treated more fairly by other unions. In the case of the M.M. & P. we understand the rationale behind the closing of the books, but feel that it is fundamentally wrong to block new members at the younger age level for long periods of time.

We recommend that seniority rules be reassessed and that operators be given a voice in the manning of their ships. Adherence to a strict seniority system and the practice of rotary shipping has serious implications that should be assessed by the Coast Guard, and we are disappointed that the operators do not exercise more steadfast persistence in bargaining with labor on these points.

On the positive side, we commend the M.M. & P. for the program at the Maritime Institute of Technology and Advanced Studies (MITAGS). This appears to be a most appropriate way for the union to promote advancement of their membership and the industry.

If, as stated in section 2 of H.R. 10413, it is the intent of Congress that the U.S. Merchant Marine Academy and the State maritime academies continue to perform their present functions, we would certainly hope that it is the intent of Congress that graduates of these programs be given equal opportunity for employment aboard ships of our merchant marine. Therefore, it is proposed that H.R. 10413 be amended as follows:

It is the intent of Congress that all newly licensed officers whose education and training has been subsidized either directly or indirectly by Federal funds, shall be given equal opportunity and status for admission to employment, including admission to membership in any union enjoying contractual relations with operating companies, whether or not those companies receive Federal operating subsidies, or do not have exclusive union hiring agreements.

Thank you, Mr. Chairman and members of the committee for your considerate attention, and this opportunity to present the views of the State maritime academies.

Mr. DOWNING. Thank you very much, Admiral Kinney, for a very comprehensive and excellent statement.

Now, gentlemen, some of you have submitted statements for the record. Those statements will be made a part of the record at this point. [The statements referred to follow:]

STATEMENT OF PRESIDENT LEE HARRINGTON, MASSACHUSETTS MARITIME ACADEMY

Mr. Chairman and Members of the Subcommittee, my name is Lee Harrington. I am here as President of the Massachusetts Maritime Academy, a position which I have held since January 1972, and I should like to thank the committee for this opportunity to represent the Academy and its graduates.

The Massachusetts Maritime Academy was founded 84 years ago. Located since 1918 at Buzzards Bay, the Academy has a long and distinguished record of service to the Merchant Marine and the U.S. Navy. Its graduates have risen to top positions as officers of merchant ships, in the seagoing components of the armed services, and in other maritime-related fields. We take pride in their outstanding accomplishments.

We began this academic year with 816 students. Besides being the maximum enrollment that can be accommodated with our facilities, this number represents the culmination of a ten-year expansion program. The fulfillment of our decade-long master plan has also witnessed the construction of a new educational plant costing 13.5 million dollars and an increase in the State's share of the Academy budget from \$550,000 to \$2,684,000. We neither plan nor foresee any appreciable increase beyond our present enrollment, which makes optimal use of our physical and personnel resources.

Rather than address H.R. 10413 in its entirety—and by extension H.R. 10500, H.R. 9864 and H.R. 1626—I prefer instead to confine my comments to those provisions of H.R. 10413 which in my judgment warrant special attention and to one other matter, not contained in the pending legislation, which is too important to overlook.

The wording in the last two lines of Section 2 of H.R. 10413 appears to vest "schools other than the United States Merchant Marine Academy and the State maritime academies" with the exclusive responsibility for meeting short-term needs for licensed officers. This provision apparently rests on the premise that industry schools "have a more flexible response time than other services." Let us not forget—and some witnesses who will appear before you will remember—that during World War II several of our State academies graduated successful deck and engineer officers in 18 months. In any future emergency four-year State academy programs could be quickly and easily converted to 18 or 24-month programs through the simple expedient of deleting from courses of study those academic subjects that relate to the baccalaureate degree and by refocusing and concentrating on those professional-technical subjects that involve preparation for U.S. Coast Guard licensing as Third Mate or Third Assistant Engineer. In my view it would be both regressive and counterproductive to ignore the record and potential of the Federal and State academies as sources of licensed officers during times of national emergency. I concur, therefore, in the suggestion offered previously that section 2 of H.R. 10413 be amended by placing a period after the word "function" in line 9 and by deleting the remaining words of this section.

I should like to add a further comment to Section 2 of H.R. 10413 with particular reference to the phrase "other institutions" occurring in line 7 of this section. It is my understanding that inclusion of these words will formalize by statute the specific participation of industry schools in the education and training of licensed officers for the Merchant Marine, a mission previously entrusted to the Federal and State academies. Although I believe that the national interest favors a coordinated system of maritime education and training, it seems to me that fiscal prudence dictates a careful analysis of the true per capita cost to the Federal government for the training of licensed officers produced by the industry schools, particularly as regards cost effectiveness of this source in comparison with other sources.

Section 4(2) of H.R. 10413 provides for an increase from \$600 to \$1,200 in the subsistence allowance for cadets at the state schools. There is little that I can add to the voluminous testimony of the past several years arguing for this increase, beginning with that of my predecessor, A. Sanford Limouze, who in hearings before this committee in 1966, proposed that the cadet allowance be raised from \$600 to \$1,000 per year with the stipulation that the recipient sail on his license 1 year for each year of allowance received. Also, during fiscal year 1974 appropriation hearings before this committee in March 1973 the State

academies jointly endorsed as a first priority item that the \$600 annual allowance be increased to \$1,200, citing as an analogous situation the identical increase granted NROTC midshipmen by the previous Congress. My own experience leads me to conclude that graduates of the State maritime academies stand head-and-shoulder above their NROTC counterparts as regards both the dollar-for-dollar Federal return and preparation for naval careers. The rhetoric for this increase has been exhausted. I urge speedy enactment of the legislation providing for an increase in the subsistence allowance from \$600 to \$1,200 per year.

I enthusiastically support Section 4(3) of H.R. 10413 which provides for the apportionment of cadet subsistence allowances to the State academies in accordance with the 1975 rather than 1965 enrollments. The Massachusetts Maritime Academy is currently allocated 77 freshman subsidies of the available 673. In its report the Select Subcommittee on Maritime Education and Training commented that "Academic Year 1973-74, 1,704—of 1,850 eligible students—received such grants. The 146 eligible students who did not receive subsistence allowances were enrolled at the Massachusetts Maritime Academy." Although the subsidy quotas are supposedly based on 1965 enrollments, the fact that one State academy, not in existence in 1965, has been granted a freshman subsidy quota indicates that the so-called "1965 level of enrollment rule" has not been uniformly applied. It may also be worth noting that the subsidy quota system was implemented in 1972 following a Maritime Administration study completed in 1970 which projected a surplus of licensed officers over jobs through 1982. Although a similar study completed in 1974 forecasts a shortage of deck and engine officers by the end of the decade and possibly earlier, there has been no comparable action to up-date the distribution of subsidy quotas to reflect either the results of this study or current enrollments at all of the State schools. I am not advocating any increase in the overall ceiling in the number of cadet subsidies. What I am seeking is simple equity in the fair apportioning of the available subsidies in direct proportion to the total enrollments of each State academy at the end of the 1975 academic year, as provided in Section 4(3) of H.R. 10413. Enactment of this legislation will foster meaningful coordination and cooperation among all of our nation's maritime schools.

The final item which I should like to address is not included in H.R. 10413 although it has been referred to by at least one earlier witness in connection with this pending legislation. This matter concerns discriminatory employment practices of certain maritime unions. One consequence of these practices is illustrated in the fact that over the past three years not one graduate of the Massachusetts Maritime Academy has obtained initial employment on a subsidized, deep-sea ship controlled by either the International Organization of Masters, Mates and Pilots or the Marine Engineers Beneficial Association, District 1. I suspect that Kings Point and the other State academies could cite similar experiences. The Catch-22 implications of this situation have a direct bearing on the ability of the Federal and State academies to motivate graduates to remain at sea, let alone obtain jobs in the industry for which they have been prepared to a significant degree with Federal and State tax dollars. It is obvious that the internal warfare exemplified by these practices benefits, in the long run, neither the maritime schools, the industry, nor the national good. In the interest of resolving the problems and antagonisms that beset the public and industry schools engaged in the training of licensed officers for the Merchant Marine, I should like to take this opportunity to propose, as a first step, that we sit down together and attempt to negotiate our differences in a spirit of detente and compromise. The forward-looking objectives embodied in H.R. 10413 can best be realized within this climate of accommodation and community of interests.

Thank you, Mr. Chairman, ladies and gentlemen, for your thoughtful attention and consideration.

STATEMENT OF GEORGE B. RECTOR, REAR ADMIRAL, USMS,
DIRECTOR, GREAT LAKES MARITIME ACADEMY,
NORTHWESTERN MICHIGAN COLLEGE

Mr. Chairman and Members of the Subcommittee: The Great Lakes Maritime Academy appreciate this opportunity to appear before you and present our views regarding two areas in H.R. 10413: Section 3. Controlled enrollments at State Academies. Section 4(c). Proration of Cadet subsistence allotments in proportion to total enrollments.

The Great Lakes Maritime Academy is a division of Northwestern Michigan College located in Traverse City, Michigan. Ours is a three year program where our successful graduates receive an Associate Degree. Since the inception of the Great Lakes Maritime Academy in 1970 it has been one of the major objectives of this Academy to work closely with the Great Lakes Maritime industry and labor to realistically train the numbers of Cadets necessary to meet their manpower needs. To date we feel we have done this successfully. Our graduate placement records indicate the degree of success.

Total current enrollment-----	110
Number of graduates to date-----	41
Number of graduates sailing-----	33
Overall percent of graduates who sail-----	80

Men not sailing are in the following fields: four related jobs, one nonrelated job, two graduate work and one not licensed.

We feel that the Great Lakes Maritime Academy is unique in that we are the only Academy on the Great Lakes with a commitment to train officers for the Great Lakes maritime industry. The Great Lakes maritime industry should not be lumped into the broad American Merchant Marine picture in that we are not heavily involved in government subsidy nor are we competing to any great extent with foreign flagships. Because of this our problems are not the same as the overall maritime industry and consequently our Academy problems are different. For these reasons we hope that you will extend to us separate understanding.

If mandated control of enrollments at the Great Lakes Maritime Academy is based on statistics derived from Great Lakes sources only we have no objection. These Great Lakes statistics will indicate the same officer requirements that our current enrollment practices reflect. We strongly encourage your support for the continuance of our current practice of a joint relationship between Industry and Labor and the Academy in determining the Industry needs and subsequent enrollments.

The Great Lakes Maritime Academy strongly supports the Cadet subsistence increase as stated in the bill and supported in the Common Statement of all State Academies. Beyond this, Section 4 speaks to the apportionment of appropriated funds among academies in direct proportion to enrollment of the Academies.

I believe the method rewards high enrollments. For the Great Lakes Maritime Academy this will definitely work a hardship since our enrollment practices effectively preclude any enrollment figures very much higher than those that exist now. As stated earlier our enrollment is based on Great Lakes merchant marine needs. I can't foresee any great expansion. I am happy with the number of subsistence allotments I presently have. Further, I am willing to share those I have in excess from time to time with others who need them. I have done this in the past. This current practice is democratic and offers flexibility. I encourage this subcommittee to review and appraise the present practice and not alter it.

The Great Lakes Maritime Academy has no strong feeling against mandated enrollment as long as it is based on Great Lakes statistics. We do feel strongly that any proration of subsistence allotments would work a hardship on our commitment to train appropriate numbers of well qualified officers for the Great Lakes merchant marine. We encourage this subcommittee's consideration of our concerns expressed in the narrative. Should you desire further information or documentation in these area, please call on us. Thank you.

SUPERINTENDENTS OF THE STATE MARITIME ACADEMIES

Mr. Chairman and Members of the Subcommittee: Maine Maritime Academy supports the combined statement of the Superintendents as presented by Admiral Kinney in its entirety. In that statement comments on Sec. 4(3) of H.R. 10413 were omitted in order to provide each school an opportunity to present separate views.

Maine Maritime Academy is strongly opposed to Sec. 4(3) in H.R. 10413 and recommends that it be deleted from this legislation. These are administrative matters that are best left to the judgment of the Secretary of Commerce and should not be enacted into law. Aside from this, the proposed reallocation of cadet subsidies on the basis of 1975 enrollments would create a grave injustice by rewarding those schools which did not heed the advice of the Maritime Admin-

istration in 1970 and would punish those who have kept their enrollments within reasonable limits.

In the fall of 1970, the Maritime Administrator announced a curtailment of cadet subsidies in order to discourage further expansion of enrollments at the state maritime academies. He arbitrarily reduced the number of subsidies allocated to each academy to the level of the 1965 freshman class. This action completely reversed the position of the Maritime Administration adopted during the 1963-1968 period, when there were serious shortages of officers. MARAD studies in 1966 forecast a continuing need for the output of all officer training programs which provided encouragement and justification for increases in all Academy enrollments. During this same period another program, the Calhoun school, was initiated. When new studies in the late 60's indicated a growing surplus of officers, it would have been more just in the fall of 1970 to have frozen the freshman subsidy allocations at the fall 1970 freshman class levels, rather than to roll back the allocations to the 1965 enrollments.

Nevertheless, from that time on any institution that continued to expand its enrollment should have been prepared to accept full responsibility for the problems that this expansion created and it would be neither fair nor reasonable to reward such an institution by a reallocation of the fixed numbers of 1965 enrollments on the basis of 1975 enrollments. Maine Maritime's enrollment has increased by only 12% since 1967, and 20% since 1965. We have been forced to alter our program to offset this 20% shortfall in subsidy allocations and recommend that the other academies solve their problem in a way that does not affect their sister schools.

From another point of view that should be considered, I'm prompted to question if people aren't so intent on looking at the forest that they don't see the trees. How many maritime academy graduates are unemployed? I doubt that there is a college or university in the country that wouldn't be envious of our placement records. Even during periods of severe recession, our graduates have put their skills to work in many different ways and you won't find them on the welfare rolls. True, they may not all find employment aboard ocean going ships, but really in the big picture how important is it that these numbers be controlled too tightly? The trademark of our country and economy is the marketplace. Even with the additional support requested in the form of cadet subsidies and fuel oil, the federal share of the total cost of our program is really not enough to keep these schools operating if their graduates don't find open arms waiting in the job market.

The facts are that the state academy programs represent a unique and extremely valuable model of higher education. The combination of vocational and a science/engineering education, with responsibility and discipline worked into the routine, and the practical training and skills acquired through maintenance and operating a ship produces a graduate who is sought after at sea and ashore.

The federal government puts so much into education and social programs that some recognition should be given to the social and economic benefits that accrue from keeping these fine model institutions healthy. It is very regrettable that the Ad Hoc Committee that spent two years studying maritime training somehow overlooked the importance of consulting with the management side of the maritime industry. I also note that management officials have refrained from presenting statements before this committee. The reason, I am told, is that because both the federal and state academy spokesmen have dared to criticize hiring policies of organized labor, these management officials are afraid for business reasons to speak out. For years these officials have visited our schools and we have attempted to fashion our program to meet their stated needs, because we believe that the owner and operator should have a major voice in our training process. Now, when they should be here to officially present their views, they find it essential to their business interests to stand on the side lines.

It would appear that the Congress should address itself to the question of why this is so and take steps to insure that during our bicentennial year curbs are placed on the abuses of power and the fear thereof that inhibit the full participation of all parties in matters of vital interest to our Merchant Marine and country.

STATEMENT OF STATE UNIVERSITY OF NEW YORK MARITIME COLLEGE

The SUNY Maritime College at Fort Schuyler is categorically opposed to Section 4(c) of the proposed Bill.

87-071-70-5

In January of 1971 the Maritime Administration informed the State maritime academies of their intention to limit the number of newly enrolled student allowances to the number allocated to each institution in the 1965 fiscal year. The quota established by MARAD for the Maritime College was 251, and our planning is founded on this.

Based upon forecasts promulgated by the Maritime Administration as to future demands for licensed officers, the Maritime College at Fort Schuyler began a modernization and expansion program in the early 60's. By the mid 1960's, prior to the imposition of the present quota system, the nucleus of the plant was completed, essentially as it is today. The plant and the quota of 251 are mutually consistent.

Further to discussions with the Maritime Administration we planned our entering class size to include about 251 cadets.

Following in our wake, the other academies each expanded to some extent; in some instances, despite warning signals from the Maritime Administration that programs might be curtailed.

Immediately after our expansion, when all things military became unpopular among the young, all officer training academies suffered. Maritime Colleges were particularly hard hit due to the publicity given to the decline of the merchant marine.

In order to keep our total student enrollment levels constant we sought alternative solutions to a problem which we expected to be temporary. Foreign students were admitted in increased numbers and we became an NROTC college. We did not depend solely on the enrollment of maritime service cadets and we agreed in consultation with Maritime Administration to the redistribution of the unused portion of our annual quota below 251.

We see clearly now that our enrollment is again on the rise and we can forecast reaching our quota of 251 cadets in two to three academic years. We have imposed limits on our other categories of students in order to achieve this goal. In the interim, we would continue to agree to the administrative redistribution of any unused portion of our quota.

We consider that the statutory authority of the Secretary of Commerce, provided under the Maritime Academy Act of 1958, should remain unaltered as it pertains to this Section 4(c).

We feel strongly that the Congress should appropriate sufficient funds each year to provide to the entering cadet a constant subsistence allowance throughout his academic career. To do less than this would be devastating to both the individual and the institution concerned. If a decreased level of funding is absolutely unavoidable, then the existing Act of 1958 together with Part 310 of General Order 87 adequately provide administrative procedures under the contingency.

STATEMENT OF REAR ADM. J. W. SMITH, SUPERINTENDENT, TEXAS MARITIME ACADEMY

I regret that distance and expense preclude my being present at the hearings of the House Committee on Merchant Marine and Fisheries on H.R. 1626, H.R. 9864, H.R. 10413, and H.R. 10500. I support Admiral Kinney's statement and request that you consider the following comments regarding any restriction on enrollment or federal subsidy payments for State Academies.

Texas Maritime Academy is one of the State Maritime Academies. It is also a division of Moody College of Marine Sciences and Maritime Resources of Texas A&M University. Consequently, it has a capacity to educate and train a wide variety of students. However, the Academy's goal is a maximum of 400 Cadets of which it has 150 now. The MARAD subsidy quota is set at 35 new students per year which will fall 65 short annually. Texas Maritime Academy is the only Maritime Academy on the Gulf Coast or in the southern U.S. The job market here continues to be excellent and all graduates obtain good jobs at sea. Investigations reveal that this goal of 100 graduates per year will be assured of jobs in this area. Texas Maritime Academy feels that the quota of 35 should be increased to 100 annually and that MARAD total quotas should be increased to incorporate this number or that quota redistribution should be made. The State of Texas, Texas A&M University, local donors, and Academy students contribute 5 to 7 times the total amount provided by the federal government for the education of Texas Maritime Academy students.

Mr. DOWNING. In addition to this statement, do you have any additional statements that you care to offer at this time, admirals?

Admiral KINNEY. May I speak to the question on which Admiral Benkert was questioned, and that is the license examination?

One has to be careful not to get a very false impression. The license examinations are taken before graduation. In some cases it is as many as 10 or 11 months before graduation.

The requirement is that the cadet completes them by the time he graduates. We carefully examined the records of each school for the past three academic graduations, and we are able to find, of all the graduates, and these are some 400 graduates per year, only four instances in which a cadet who had received a subsidy from the Federal Government was not a licensed officer in the merchant marine when he graduated.

Now, the examination, when taken, consists of six parts for the deck officers, eight parts for the engineer officers.

A failure of two parts or less means that they retake that part. A failure of more than two parts means they take the entire examination again, 3 months later.

During this makeup or reexamination process they all qualify, and all of those who have received the subsidy are licensed officers when they graduate from the State academies.

Mr. DOWNING. How do you account for the figures which the Coast Guard supplied us, which show a rather dismal record?

Admiral KINNEY. They are the first-time examinations, and as I say, sometimes taken months before graduation.

Mr. Chairman, they are the result of a shift from the essay type to the multiple choice. They are shaded by several things.

First, they include foreign students who have a notable difficulty with those examinations, and who fail them, and in fairly high numbers. They take the examination despite the fact they cannot be licensed when they do complete it, and they are given a certificate of equivalency in lieu of the license.

It also is a matter of getting acquainted with the new examination. I am sure those figures will change.

The facts on those are, at the time they graduate, they have all completed the deficiencies, and have passed the examination, and are licensed.

Mr. DOWNING. Would any of you other gentlemen care to supplement your testimony?

Admiral RODGERS. I think it is only fair to state that when that new examination was introduced, some schools elected to try to train the individuals to pass a specific type of examination. That is a procedure that goes on in many schools.

Some of us, Mr. Chairman, in retrospect, should have put more effort into that. I know personally that I did not. I felt let the chips fall where they may, and not over react at this time.

Mr. Chairman, you are looking at the last 2 years. This is a brand-new type of examination. If you go back over the years, you will find, you know, a very high passing rate.

As a matter of fact, in that first year of the examination, 30 individuals the following week—the 30 who had failed on this new objective-type examination—were permitted to retake the exam under the old S-A, and everyone passed it.

Mr. Chairman, we are going through a cycle of learning, even at the schools. Some of us in retrospect, perhaps, should have geared up to pass an exam.

I personally question whether that is a good procedure. You know, I think we train them, and the records are clear that they are capable, but whether or not we spend a lot of time just cramming for certain types of questions and answers is, perhaps, you know, we have to do more of that—but I think that is more of the answer.

Now, at this time, if I might, Mr. Chairman, there is an individual in this room, Mr. Sulin, who is a member of the staff of one of the committee members. Mr. Sulin is a graduate of the Maine Maritime Academy—and we consider him an expert. He graduated from the academy and took the older-type examination for third mate, and more recently took a second-mate examination with the new type of exam. I think perhaps he would be qualified to answer specific questions, if the committee would be interested.

Mr. DOWNING. Thank you, Admiral.

Admirals, I did not mean to shortchange any of you. If you have any statements you would care to make supplementing Admiral Kinney's statement, or if you want to read your own statement, please feel free to do so.

Does anybody have a supplementary statement, or shall we get to the questions.

Suppose we go into the questions then.

Madam Chairman, I defer to you.

Mrs. SULLIVAN. Yes, Mr. Chairman, I have several here.

Admiral Kinney, why do you take exception to the provisions in H.R. 10413 that the union schools are better able to meet short-term emergency requirements for licensed officers?

Is it not true, for example, that the school in Baltimore has the shortest curriculum, all of which is directed toward ship operation?

Would this not indicate a greater surge capability?

Admiral KINNEY. They definitely have the capability. I do not think the capability exceeds the capability of the academies, which have equal facilities, if not better, and which can respond by both early graduations of enrolled cadets, and can take on side-by-side with the cadets for emergency, short-term training programs, as was done in World Wars I and II.

Mrs. SULLIVAN. Those who go to the school in Baltimore are not all younger students, are they? They are possibly members who come back for specialized training in engineering and meet the requirements of the ships that are in use at the time.

Admiral KINNEY. I understand that one-third of the school is devoted to training licensed engineers through that source, in various skills to meet the need of the merchant marine.

Just as the service Academies, in time of war, have always run accelerated programs, right alongside their regular programs, they have graduated classes earlier, and also trained reserve officers side by side, this same capability exists in the State maritime academies.

Mrs. SULLIVAN. In other words, you are giving them training for the jobs they are to do, and licensed to do, but not giving them a general educational program in the union schools, where as in the academies, they get the general education along with it.

Admiral KINNEY. Short-term programs in the maritime academies would not be educational programs; they would be training programs.

Mrs. SULLIVAN. Would you please explain for us in more detail the practice of rotary shipping to which you refer on page 9 of your statement, and which you believe should be assessed by the Coast Guard?

Admiral KINNEY. Rotary shipping says, in effect, that except for the master and the chief officer, who can be identified with the ship's other officers—and we are speaking now of deck—at the conclusion of their period on board, 6 months, they must leave that ship, and must take their vacation time, and then have no priority to return to that ship.

We are saying, in effect, that constantly rotating pool of watch officers below the chief mate level degrades performance, Madam Chairman.

Mrs. SULLIVAN. I wish each of you superintendents present at the table would answer these questions. There are three or four of them.

One is, are all of your graduates required to sit for the Coast Guard licensing examination, and if not, how many do, in fact, take those examinations?

Now, I think if you do not have the exact figures, that if you would give it to us for the record for each academy, and those who are not here, we will try to get the word to them.

Admiral KINNEY. I would be glad to have that done, Mrs. Chairman, and offer it for the record.

The answer is, it is only a rare exception where a person does not sit for the license.

Mrs. SULLIVAN. That is what I was going to ask. Is it possible for a student subsidized by the Government to graduate from one of your schools and elect not to take the Coast Guard examination?

Admiral KINNEY. The answer is negative, except in the case of the four exceptions I mentioned. They are people who just were never able to do it.

Mrs. Chairman, they would keep sitting for the exam, and just could not pass it. That is 4 out of approximately 1,200 over those 3 years.

Admiral HARRINGTON. If I may answer from the Massachusetts Maritime Academy, 2 years ago the passing of the license examination was a requirement for the degree.

Mrs. SULLIVAN. The third question is what is your opinion of the present Coast Guard examination?

If you would like to analyze this and give a fuller statement later, that is fine, but just off the cuff, do you feel it is a good examination, or should it be improved?

Admiral KINNEY. We feel it is an excellent examination. The transition has caused us problems.

We think it is definitely a step in the right direction, Madam Chairman.

Some of the problems have been that in making up the questions themselves, it is possible for an expert to take the examination and get some questions wrong.

For example, in navigation, the small area plotting sheet, made it impossible to determine which of two of the multiple choices answers was correct.

Working with the Coast Guard they are quickly eliminating these, and improving the examination all the time. Growing pains have

been a little difficult, but we would certainly not advocate it be abandoned, and we admire the work the Coast Guard has done. They have been very fine in working with all the sources that take the examination to assist them in the formulation of questions, and work out what is a good examination.

Madam Chairman, we would have nothing but praise for it.

Admiral HARRINGTON. Mr. Chairman, I did not introduce myself. I am Lee Harrington, president of the Massachusetts Maritime Academy.

Since the Massachusetts Maritime Academy was mentioned by name a short while ago as to its very low or very high percentage of failures in this examination, I have the exact figures for my school in the 1974-75 essay type examination.

We had no examination in 1973, because we had no graduating class. We moved from a 3-year school to a 4-year school. For many, many years, as Admiral Kinney has told you, the percentage of our graduates that passed the essay license examination varied between 95 and 100 percent.

In 1974, when the objective type came on the scene for the first time we were shocked when, on the first taking of the examination of 41 engineering cadets, only two completely passed the examination, although there were 13 partial successes. There were 26 outright failures.

In the deck area we performed better—7 of the 28 passed initially, and there were 10 total failures.

Now, to the factors as to why that performance was so poor. My own judgment is that my faculty, over the many, many years of essay type of examination were indoctrinated to preparing for this type of examination.

There seems to be, in addition, after the examination, after the post mortem, to be conducted, to be almost unanimous agreement that there was a lack of validity in the questions, as Admiral Kinney has mentioned, whereas, the Coast Guard considered one particular multiple choice answer to be correct, there was considerable agreement that another could have been equally correct.

The examination has been improved upon, as our performance has dramatically improved. In 1975, of 70 engineers, 23 passed.

So we moved on the initial taking of the examination, we moved from 5 percent passing in this examination to 33 percent in 1 year.

In the second passing of the examination in 1974, we moved from 5 percent to 80 percent. We moved to 90 percent at the time of graduation in May, and to 100 percent in August.

The same thing happened in 1975.

Like Admiral Kinney has said, we too think the examination perhaps is a better type of examination than the old essay type examination. If you wrote long enough, at some point you managed to get the answer to the question.

I think the objective will go much closer to the heart of whether or not the person knows the answers.

I also agree with the representative from the State of Maine, who suggested earlier that the performance in the classroom did not mean we would turn out the best product.

Mrs. SULLIVAN. I know the Military Academies are trying to change our method of selecting nominees for the three Academies. They want

us to take away the civil service examination that we members require so that we can get help to make our selection.

I am opposing this because I believe that the more examinations that a student has the better able they are to cope with these kinds of questions that come up. It depends, too, on the speed in which they answer them, as well as their answers. I like it as a trial for them so when they have to take the real thing as to whether or not they are going to be accepted they have a little background of what it is to sit there and sweat these things out.

I would never, having had something to do with examining students, I would never just take one examination as a rule of thumb for accepting or rejecting anyone, because I think there is much more in the ability of an individual to understand than there is to sit down under pressure and answer questions.

It does help, even though sometimes we wonder how they can get such low scores, and coming out with such grades in the high schools, to really make poor grades on a civil service examination.

It does give you a good feeling of knowing what they can do under pressure, and I think it gives them some kind of a way to understand what it is when they have to sit down and take the main examination, that they will not be so frightened, and they are not the same kind of questions, as I am sure you understand, but it gives them this experience.

My last question is, and I would like to have it for the record, and you probably could not give it to me now, but how many of your graduates who obtain licenses are placed on merchant marine ships as officers?

I do not think we have that anywhere that I know of now in our record.

Admiral KINNEY. We will be very happy to give you a summary of the present employment of the most recent graduating class. We have that for each school, and can provide it to you.

Mrs. SULLIVAN. If you have these figures on some past graduating groups, I think it would be helpful so that we want to know if we are underproducing or overproducing, so that we have a more intelligent way of measuring.

Admiral KINNEY. And we will show those that are going deep sea, those on the inland waterways, those in the offshore rigs, those that go into the Coast Guard, Army, and Navy.

Mrs. SULLIVAN. And believe me, we are doing our best to get them more ships at sea, and keep towboats operating on the rivers. The industry is growing. We hope it will grow so we need the good graduates and the good students.

We want to find the best way to make them available.

Admiral HARRINGTON. Well, of course, we can provide you that information, and the breakdown.

Let me make the comment, and the committee should make note of the fact that in the last 3 years there has been 100 percent job placement of our graduates.

Mrs. SULLIVAN. But are they on ships?

Admiral HARRINGTON. That breakdown will show this, but the great percentage of them are out there following their profession.

In the question you were asking earlier of the Coast Guard, let me tell you as far as the Massachusetts Maritime Academy is concerned, that one of my first acts in January 1972 as president, was to establish a placement officer on campus.

Up to that point, the placement was carried on by the alumni organization, but for the last 3 years I can put my finger on the whereabouts of 98 percent of the graduates for the last 3 years.

Mrs. SULLIVAN. That is very good.

Mr. Rector. Mrs. Sullivan, in my addendum report to the common report I have included figures that you have asked for.

We have 80 percent of our overall graduates from the inception of our program in late 1969 who are actually sailing, and the 20 percent who are not sailing are also accounted for in that addendum report.

I would like to add, as Lee Harrington did, that we have a placement program, and we keep very close contact on the job availabilities with a cooperative effort with the maritime industry on the Great Lakes, and the unions on the Great Lakes, so that we can realistically set our admissions in any one given year to attune them to the job prospects 3 years down the road, as best we can perceive them, 3 years in advance.

Mrs. SULLIVAN. Very good. It is our hope that we will be able to find the methods, or that the Maritime Administration will find a method to have a more equal distribution according to the enrollment in the schools of the Federal funds.

Admiral HARRINGTON. May I speak to that?

As your Chairman has noted, I have submitted a statement for the record, and as you might recall, Admiral Kinney, in his prepared statement for us noted that only on section 4-3 of H.R. 10413, or perhaps it is 4-C, but call it what you will, have we been unable to come to a meeting of the minds on a common position; that is the distribution formula in effect on our subsidy.

The Massachusetts Maritime Academy feels it is being unfairly treated by a distribution formula being employed that is based upon tuition enrollments at the 1965 level at these academies.

The argument is made that the Maritime Administration cautioned the schools when they restricted the subsidy situation in 1971 not to turn out too many graduates.

The Massachusetts Maritime Academy went ahead with its building plans, and that in no way should affect its judgment at that particular time.

Now, in 1964 the Massachusetts Maritime Academy consisted of an inadequate training vessel, a rotting finger pier, a warehouse for a classroom building on the dock, and nothing else.

In order to bring ourselves into compliance with the Maritime Administration's General Order No. 87, namely that the academies have adequate classroom and messing facilities ashore, the legislative and executive branches of the Commonwealth of Massachusetts huddled together and decided to build a new marine college at Buzzards Bay, in Massachusetts.

They decided to spend some \$17 million of taxpayers' money in building this new instant beautiful school.

In 1965, 1966, and 1967 appropriations, that is capital appropriations, legislation was passed by the Commonwealth of Massachusetts

that authorized the expenditure of some \$12 million in those 3 years for the building of this new Maritime Academy.

It was in those years, 1965, 1966, and 1967, and as late as 1969 that the Maritime Administration stated there is going to be a shortage of qualified officers for the merchant marine.

While the new college was being built they were telling us they were going to need more officers. A master plan was developed as the school was built for an enrollment schedule, and what it really called for was going from an enrollment of 250 cadets in 1972, to 800, our maximum enrollment, which we reached in 1975.

Now, in 1970 a Maritime Administration study said all of a sudden there is not going to be a shortage, there is going to be an overage, and they said you Maritime Academies, you have a new distribution of subsidies.

Up until that time every cadet that came into the Massachusetts Maritime Academy got a subsidy. You are only going to get 77 subsidies, because that is what your enrollment was in 1965.

Well, by that time this new instant college was 80 percent built, and it was not just one building. It was a whole new instant campus.

To give you an idea of how instant it was, in 1972, when the new land campus opened up I took over for full use and occupancy in one month, three new buildings. This new school came on, and the legislature said you have to have some sort of reasonable capital outlay. You have to move to the 800 enrollment figure.

Well, we have, in the last 3 years, and it is just as well we did, because in 1974, 4 years after the 1970 study, that said there was going to be an oversupply, now they are talking about an undersupply.

The point is, that the distribution formula now in effect is based upon an enrollment figure that is 10 years old. The Massachusetts Maritime Academy gets 77 subsidies, while our sister academies get a greater proportionate number.

I earnestly, on the basis of fairness, ask your committee to look carefully at section 4-3 of this legislation. I hope you will agree with me that it is reasonable and fair that the distribution formula be changed in the light of the 1975 enrollment situation.

Mrs. SULLIVAN. I am sure we have all recognized that, and I hope we can get it corrected.

Admiral RIZZA. I am Admiral Joseph Rizza, president of the California Maritime Academy. I have come several thousand miles and I would like to offer my comments, although I agree in general with what has already been said by Admiral Kinney.

Our graduates in the last 3 years have all passed the license examination, except one. I think that the new Coast Guard examinations are good.

We note that the Coast Guard is making great effort to improve the new examinations when there is any doubt about the questions.

Some of the questions at the initiation of the new examination, as we all agree, were probably not good questions, but they have been improved or replaced.

How many of our officers go to sea?

Virtually 100 percent of my graduates go to sea, both at sea and on the inland waters.

Since we are the only academy on the west coast, we have no problem with jobs for our graduates.

Mrs. SULLIVAN. Admiral Rodgers, did you care to add anything?

Admiral RODGERS. I am Ted Rodgers from the Maine Maritime Academy.

I somewhat concur with Admiral Harrington but the reason we decided to present individual statements was because there was a disagreement, and the basic disagreement, I guess, is that none of us want to be hurt. We all want to be helpful to the other fellow. But if it means you are taking the same pie and dividing it a little thinner, then I have to speak in our own defense.

If I might, and let me say I was just going to let it stand for the record, but I would like to read my statement, and I will try to do it as quickly as possible if that is all right.

Mr. DOWNING. You may proceed, Admiral.

Admiral RODGERS. The Maine Maritime Academy supports the combined statement of the superintendents, as presented by Admiral Kinney, in its entirety. In that statement, comments on section 4(3) of H.R. 10413 were omitted in order to provide each school an opportunity to present separate views.

Maine Maritime Academy is strongly opposed to section 4(3) in H.R. 10413 and recommends that it be deleted from this legislation. These are administrative matters that are best left to the judgment of the Secretary of Commerce and should not be enacted into law.

Aside from this, the proposed reallocation of cadet subsidies on the basis of 1975 enrollments would create a grave injustice by rewarding those schools which did not heed the advice of the Maritime Administration in 1970 and would punish those who have kept their enrollments within reasonable limits.

In the fall of 1970, the Maritime Administrator announced a curtailment of cadet subsidies in order to discourage further expansion of enrollments at the State maritime academies. He arbitrarily reduced the number of subsidies allocated to each academy to the level of the 1965 freshman class. This action completely reversed the position of the Maritime Administration adopted during the 1965-68 period when there were serious shortages of officers.

MarAd studies in 1966 forecast a continuing need for the output of all officer training programs which provided encouragement and justification for increases in all academy enrollments. During this same period, another program, the Calhoun School, was initiated. When new studies in the late 1960's indicated a growing surplus of officers, it would have been more just in the fall of 1970 to have frozen the freshman subsidy allocations at the fall 1970 freshman class levels, rather than to roll back the allocations to the 1965 enrollments.

Nevertheless, from that time on, any institution that continued to expand its enrollment should have been prepared to accept full responsibility for the problems that this expansion created and it would be neither fair nor reasonable to reward such an institution by a reallocation of the fixed numbers of 1965 enrollments on the basis of 1975 enrollments.

Maine maritime's enrollment has increased by only 12 percent since 1967, and 20 percent since 1965. We have been forced to alter our program to offset this 20-percent shortfall in subsidy allocations and recommend that the other academies solve their problem in a way that does not affect their sister schools.

I am in favor of more subsidies. I am not in favor of losing some of my own. I think Admiral Harrington's plea is a good one and so is his justification.

I have the unique position of having been at the Maine Maritime School since 1965, and longer than the others. There is good justification. I am not prepared to give up something. I need 40 more subsidies and it is a problem.

Let me mention something from another point of view that should be considered and that is I am prompted to question if people are not so intent on looking at the forest that they do not see the trees.

How many maritime academy graduates are unemployed? I doubt that there is a college or university in the country that would not be envious of our placement records. Even during periods of severe recession, our graduates have put their skills to work in many different ways and you will not find them on the welfare rolls.

True, they may not all find employment aboard oceangoing ships, but really, in the big picture, how important is it that these numbers be controlled too tightly?

The trademark of our country and economy is the marketplace. Even with the additional support requested in the form of cadet subsidies and fuel oil, the Federal share of the total cost of our program is really not enough to keep these schools operating if their graduates do not find open arms waiting in the job market.

The facts are that the State academy programs represent a unique and extremely valuable model of higher education. The combination of vocational and a science/engineering education, with responsibility and discipline worked into the routine, and the practical training and skills acquired through maintenance and operating a ship produces a graduate who is sought after at sea and ashore.

The Federal Government puts so much into education and social programs that some recognition should be given to the social and economic benefits that accrue from keeping these fine model institutions healthy.

It is very regrettable that the ad hoc committee that spent 2 years studying maritime training somehow overlooked the importance of consulting with the management side of the maritime industry. I also note that management officials have refrained from presenting statements before this committee. The reason, I am told, is that because both the Federal and State academy spokesmen have dared to criticize hiring policies of organized labor, these management officials are afraid for business reasons to speak out.

For years, these officials have visited our schools and we have attempted to fashion our program to meet their stated needs, because we believe that the owner and operator should have a major voice in our training process. Now, when they should be here to officially present their views, they find it essential to their business interests to stand on the sidelines.

It would appear that the Congress should address itself to the question of why this is so and take steps to insure that during our Bicentennial Year curbs are placed on the abuses of power and the fear thereof that inhibit the full participation of all parties in matters of vital interest to our merchant marine and country.

If I could just ad lib on one other thing, Mr. Chairman.

We refer to the response, the timeliness from the State academies.

Traditionally, the State academies were school ships and everything took place on the school ships. Now, the General Order 87 put out by the Maritime Administration of the Department of Commerce requires us to have a shoreside campus, and that is what Admiral Harrington was referring to.

We were required to build the dormitories and the dining halls. Today, it is an entirely different picture than it was in 1965.

When you ask about to an emergency, if you wanted to send 300 students to Maine's Maritime Academy this afternoon, I can do something for you this afternoon. I could not do it in 1965 because I had a ship full of people.

Today we have this brandnew campus, laboratories, a ship that can accommodate several hundred, nighttime, Saturdays, Sundays, the emergency needs could be met immediately.

We sometimes look back and try to fight the next war like we fought the last one.

Mrs. SULLIVAN. Our second bell rang and we will have to go to the floor.

The chairman said the entire statement would be put in as part of our hearings.

I have taken up too much time on this, but no one interrupted me.

Mr. DOWNS. They were very good questions, Madam Chairman.

[The following responses were submitted in reply to Chairman Sullivan's questions:]

MASSACHUSETTS MARITIME ACADEMY RESPONSE TO MRS. SULLIVAN'S QUESTIONS

Question 1. Are all of my graduates required to sit for the Coast Guard licensing examination, and if not, how many do, in fact, take these examinations?

Reply. Although subsidized cadets graduating from the Massachusetts Maritime Academy are not required to sit for the license, 100 per cent of those who graduated previously have, in fact, sat for the examination. Until two years ago the awarding of the degree was conditioned upon passing of the original license examination. This requirement, however, was discontinued because two former cadets, who had been dismissed for disciplinary reasons after completing the academic program, successfully challenged the Academy's policy in court. With rare exceptions graduates are strongly motivated to sit for the Coast Guard license examination because of expanded employment opportunities available to those holding the license. Also, since subsidized cadets must agree in writing to apply for commissions as Ensign in the U.S. Naval Reserve upon graduation, this condition serves as an added inducement to sit for the license examination.

Question 2. Is it possible for a student subsidized by the Government to graduate from one of your schools and elect not to take the Coast Guard Examination?

Reply. As I indicated above, although it is possible for a subsidized cadet to graduate from the Massachusetts Maritime Academy and elect not to take the Coast Guard examination, none have chosen not to sit for the examination. The regulations and minimum standards for State maritime academies pertaining to entrance requirements and conditions for the subsistence allowance are contained in General Order 87, Rev., as promulgated by the Maritime Administration. This directive contains no provision which mandates that subsidized cadets of the State academies take the Coast Guard examination upon graduation. Consideration should be given to the inclusion of such a requirement in the Federal regulation.

Question 3. How many of your graduates who obtain licenses are placed on Merchant Marine ships as officers?

Reply. Placement information on the most recent graduating class, June 1975, reflects the latest employment opportunities and trends, as follows:

Deep-sea, American flag-----	125
Deep-sea, foreign flag-----	8
Offshore oil/mineral vessels, oceanographic-research, etc-----	45
Maritime related industry-----	3
Nonmaritime related industry-----	11
U.S. Coast Guard-----	1
Other employment-----	5
No information-----	6
Total-----	105

¹ No member of the 1975 graduating class was placed on an American-flag, deep-sea ship controlled by the Marine Employees Beneficial Association or the Master, Mates & Pilots unions.

Question 4. If you have these figures on some past graduating groups, I think it would be helpful so that we want to know if we are undergraduating or overproducing so that we have a more intelligent way of measuring.

Reply. Placement experience for the past two to three years reflects a widening of job opportunities, especially in offshore oil/mineral vessels, inland waterways and Great Lakes shipping. Every member of the Class of 1975 had at least one employment offer, most of which were in seagoing billets or maritime related jobs. In my judgement, the employment outlook for graduates of the State and Federal academies will remain bright for many years to come. I attribute this sanguine forecast to the fact that graduates of the State and Federal academies are uniquely prepared for an increasing variety of demanding and sophisticated maritime careers.

TEXAS A. & M. UNIVERSITY,
MOODY COLLEGE OF MARINE SCIENCES AND MARITIME RESOURCES,
Galveston, Tex., January 5, 1976.

MS. FRANCES STILL,
Chief Clerk, U.S. House of Representatives, Committee on Merchant Marine and Fisheries, Longworth House Office Building, Washington, D.C.

DEAR MS. STILL: As you are undoubtedly aware I was unable to attend the hearings on 3 December before Mr. Downing's Sub-committee regarding HR 10413. Admiral Kinney, however, sent me a copy of parts of the testimony and I am responding to Mrs. Sullivan through you regarding some questions she posed at the hearings to all State Maritime Academy Superintendents. My response will include the questions posed, the answers as they apply to Texas Maritime Academy, and a breakdown of the last three classes at TMA and their current employment. My responses are attached to this letter and should you have further questions regarding them please correspond or call me.

Very sincerely yours,

JOHN W. SMITH,
Rear Admiral, USMS, Superintendent.

Enclosures.

RESPONSES OF TEXAS MARITIME ACADEMY COVERING QUESTIONS BY MRS. SULLIVAN CONCERNING H.R. 10413

Question 1. Are all of your graduates required to sit for Coast Guard license exam, and if not, how many do, in fact, take those examinations? Is it possible for a student subsidized by the Government to graduate from Texas Maritime Academy and elect not to take the Coast Guard examination?

Answer. All subsidized cadets at TMA are required to sit for the Coast Guard license exam and exam as long as they have passed the medical examination and are students in good standing at the Academy. To the best of my knowledge, all qualified students have taken the examination and passed. If a cadet should indicate a desire not to take the examination the U.S. Coast Guard and Maritime Administration would be so informed and the student would obviously be disenrolled from the license program. TMA, as previously indicated, is a division of Moody College of Marine Sciences and Maritime Resources of Texas A&M University. There are students enrolled at TMA who are not in the license program or sub-

sided by the Government, but who are pursuing a degree program only. These students receive a degree like the rest of our cadet graduates from Texas A&M University. As a matter of information, our Coast Guard license examinations are given the first week in December prior to the student's graduation in May.

Question 2. What is your opinion of the present Coast Guard examination?

Answer. I feel an objective type of examination at this level is a good thing. I have found by experience that when the current examination was instituted there were many questions that needed revision because of possibility of more than one answer being appropriate. The U.S. Coast Guard was most cooperative and interested in revising such questions and a continuing program exists at this time. I think over the years the objective type questions will be a distinct advantage.

Question 3. How many of your graduates who have obtained licenses are placed on Merchant Marine ships as officers? Please include some past graduating groups to indicate the types of careers and sailing they have chosen.

Answer. I have included a breakdown for the classes of 1973, 1974, and 1975, which are attached to this package.

EMPLOYERS OF GRADUATES AND UNION STATUS

Graduate	Employer	Union status
1973—Engineering:		
L. A. Brochtrup	Gulf Oil Corp.	Nil.
P. A. Colson	Sea Bulk	Nil.
J. P. Darby	SEPKO	Nil.
S. D. Devoy	Various	M.E.B.A.
S. M. Dienst	Brown & Root	Nil.
R. E. Eckley	Offshore Co. of Houston	Nil.
D. E. Hincey	Sea Bulk	Nil.
M. M. Krider	Reynolds Metals	Nil.
J. F. Mangel	Reynolds Metals	Nil.
J. F. Moore	Matthews-Daniel Co.	Nil.
R. L. O'Neal	Gulf Oil Corp.	Nil.
J. F. Rodgers	Unknown, ashore (large shipping firm)	Nil.
1973—Transportation:		
C. R. Bigler	Mid-Gulf Stevedores	Nil.
A. R. Blackwelder	Various	I.O.M.M.P.
J. S. Cummins	Brown & Root	Nil.
A. F. Gallinski	Various	I.O.M.M.P.
R. Graham	Texaco, Inc.	Nil.
L. LeCain	Exxon Co.	Nil.
M. S. Phelps	Lynberg Marine	Nil.
Recap		Number
Sailing deep sea nonunion		9
Sailing deep sea union		3
Working ashore in a marine related industry		7
Total		19

Graduate	Employer	Union status
1974--Engineering:		
J. D. Harrison	Sabine Transport	Nil.
D. A. Johns	Diamond Shamrock Corp	Nil.
A. O. Leskinen	Zapata Marine	Nil.
O. B. McReynolds	Sabine Transport	Nil.
G. A. Treadwell	Exxon Co.	Nil.
L. S. Willrich	Diamond Shamrock Corp	Nil.
1974--Transportation:		
H. G. Garza	Various	I.O.M.M.P.
M. G. Miller	Inland River Transportation Co.	Nil.
T. F. Nelick	Reynolds Metals	Nil.
R. A. Redfern	Exxon Co.	Nil.
C. A. Sanders	Bay Houston Towing Co.	Nil.
J. Tschirhart	Shell Oil Co.	Nil.
L. M. Unzicker	Peterson Marine Services	Nil.
Recap		Number
Sailing deep sea nonunion		5
Sailing deep sea union		1
Sailing with towing vessels, nonunion		1
Working ashore in a marine related industry		6
Total		13

CLASS OF 1975, EMPLOYERS, UNION STATUS
ENGINEERING

Graduate	Employer	Union status
W. P. Boyd	Global Marine	Nil.
G. C. Cooper	Various	M.E.B.A.
D. F. Driscoll	Exxon	Nil.
R. L. Jones	Sabine Towing	Nil.
R. J. Hunt	Various	M.E.B.A.
L. W. LeFlare	Exxon	Nil.
D. D. McCall	Various	M.E.B.A.
R. L. Schuckhart	Various	M.E.B.A.
J. G. Tompkins	Liberty Towing	Nil.
T. O. Wilhite	Various	M.E.B.A.
Recap		Number
Sailing deep sea union contracted vessels		5
Sailing deep sea and towing, nonunion		4
Shoreside with a towing company		1
Engineering graduates		10

TRANSPORTATION

Graduate	Employer	Union status
S. W. Craig	Crowley Marine	Nil.
J. L. Haley	G & H Towing	Nil.
S. A. Jones	U.S. Corps of Engineers	Nil.
C. E. Larsen	Amoco Oil Co.	Nil.
D. L. Lloyd	Lykes Bros. S/S Co., Inc.	Nil.
J. L. Martin	Zapata Towing	Nil.
D. D. McDonald	do	Nil.
G. C. Reeser	Sabine Towing	Nil.
Recap		Number
Sailing deep sea nonunion vessel		2
Sailing with towing vessels, nonunion		5
Shoreside with a Steamship Co.		1
Transportation graduates		8

STATE UNIVERSITY OF NEW YORK MARITIME COLLEGE ANSWERS TO
MRS. SULLIVAN'S QUESTIONS

Question 1. Are all graduates required to sit for the U.S. Coast Guard licensing examination, and if not, how many do, in fact, take those examinations?

Answer. All U.S.M.S. Cadets and NROTC Midshipmen are required to sit for the U.S. Coast Guard license examination. In addition, the U.S.C.G. permits foreign born cadets, who are graduates of the Maritime College, to sit for this examination. The later, of course, do not receive a license; The U.S.C.G. will issue an equivalency certificate to the successful candidate. American students who do not receive a subsidy are not required to sit for this exam but may do so if otherwise qualified by the U.S.C.G.

Question 2. Is it possible for a student subsidized by the Government to graduate from one of your schools and elect not to take the U.S.C.G. examination?

Answer. A subsidized cadet cannot meet the requirements for graduation unless he takes the U.S.C.G. examination.

Question 3. How many of your graduates who obtain licenses are placed on merchant marine ships as officers?

Answer. During the 1975 calendar year, 120 subsidized cadets were graduated from the Maritime College at Port Schuyler. A telephone survey of these 120 graduates was conducted between 5 December 1975 and 5 January 1976. The results, from the 100 respondents, are tabulated below. Regrettably, we experience the same difficulties obtaining employment information that the U.S.C.G. and other federal agencies encounter. Paralleling the telephone survey was a mail survey. We hope the latter will prove more fruitful.

Shipboard employment:	Persons
(a) U.S. flag offshore-----	36
(b) U.S. flag coastwise-----	13.
(c) Foreign flags-----	4
Maritime industry ashore-----	11
Armed Forces:	
(a) U.S. Naval Academy instructor-----	1
(b) U.S.C.G. marine inspection-----	2
Power plants-----	6.
Nonmaritime employment-----	15
Employed parttime-----	9
Graduate schools-----	3

MAINE MARITIME ACADEMY SUPPLEMENT RESPONSE TO QUERIES BY
MRS. SULLIVAN

Testimony of Rear Admiral E. A. Rodgers, Superintendent, Maine Maritime Academy before the Merchant Marine Subcommittee, House Committee on Merchant Marine and Fisheries on H.R. 10413.

Question. Are all your graduates required to sit for the Coast Guard licensing examination, and if not how many do in fact take those examinations? Is it possible for a student subsidized by the government to graduate from one of your schools and elect not to take the Coast Guard examination?

Answer. Strictly speaking the answer is no. Taking or passing of the Coast Guard examination is not a prerequisite for meeting graduation requirements. In the eleven years I have been superintendent, however, I am not aware of any U.S. citizens refusing to take the Coast Guard examination, and with only one or two exceptions at the height of the Vietnam anti war agitation, none of the subsidized cadets has refused to apply for the naval reserve commission. Those

cases were referred to the Maritime Administration for whatever followup they considered desirable.

Objectively speaking there is no sense in a student, whether subsidized or not, completing a four-year program designed primarily for a specialized vocational objective not taking the examination which accords his ultimate credential, whether or not that student intends to pursue immediately a career at sea. There is no statutory obligation for a student even though subsidized, to take the examination. While I personally do not feel that course to be necessary, for the reason outlined above, it is a matter for the judgment of the committee.

Question. What is your opinion of the present Coast Guard examination?

Answer. Despite the problems students, and in a sense the Academy faculty, seem to have had in adjusting to the new format, on balance I feel the Coast Guard has made significant progress in objectifying and modernizing the examination process. Coast Guard officials have demonstrated good will and have made sincere efforts to clear up the ambiguities we all recognized were present in the initial model.

I am not disturbed that students may need to take the examination two or even three times in order to pass. Our educational process is such that a great mass of technical information, practical experience, and rote learning must be absorbed over the four year period. We devote only six weeks to reviewing three and a half years of training before students are obliged to take the examination. Nothing focuses attention on one's weaknesses more surely than initial failure. We have had no American students who, after applying themselves, did not succeed in passing. To sum up, I feel the Coast Guard had done a good job and should be commended.

Question. How many of your graduates who obtain licenses are placed on merchant marine ships as officers?

Answer. As the committee is aware, no school has the means or enforcing authority to require its graduates to report their job placement history. Periodically we circularize our alumni by last known address, in an effort to maintain current membership rosters. We have fairly complete information on initial placement for the graduates of the last three years by company of hire, and deck or engine category. (Lists attached.) I think it is fair to say that there is a demand for our graduates, judging by these records, in maritime and marine related fields, sufficient to justify our continued existence at our present enrollment. Maine Maritime Academy has no plans, now or in the foreseeable future, short of a national emergency, for additional expansion. I would hope that our performance and the proven existence of a job market for our graduates would serve to convince the federal government of the merit of a reappraisal of the level of direct federal support to our program, as well as to our students individually.

With regard to controlling the supply and demand of merchant marine officers, it should be understood that the graduates of state maritime academies operate in the traditional American marketplace and, if we boast faith in the free economy system, then the academies cannot survive if their graduates do not succeed in the marketplace. This is particularly so with the state maritime academies, because they are expensive programs under constant challenge by states and students who provide 90% of the financial support of our operation. These natural forces are better controlling devices than the proposed congressional regulations under H.R. 10413. The same forces do not act to control the union school or federal academy, since the education is free to students and in the case of the union schools the students are paid. Also, since the union school can control union membership, job opportunities and pensions, they enjoy a decided advantage under the law which is not in keeping with the practices that contributed to the phenomenal growth of our country during the past 200 years.

PLACEMENT SURVEY

	Deck	Engine
CLASS OF 1975:		
Deep sea shipping (15):		
U.S. Flag:		
Columbia University research vessel.....		1
Getty Oil.....		1
Gulf Oil.....		2
Texaco.....		2
Union Oil of Calif.....		1
ARCO.....		1
Exxon.....	1	2
American Export Lines.....		1
Military Sealift Command.....	1	1
Foreign flag: Antilles Navigation.....	1	
Tugs (23):		
Sause Bros.....	3	
Interstate Oil.....	3	
Moran.....		6
Red Stack.....	1	2
Mobil.....		
Old River Towing.....	1	
Hawaiian tug and barge.....		2
Texaco.....		1
Sheridan Transportation.....	1	
Offshore supply boats/research (14):		
Tidewater Marine.....	1	
Shell Oil Research.....	2	2
Zapata.....	1	
Arthur Levy Boat Service.....	1	
Offshore logistics.....		1
Delata Marine.....		2
Seafleet.....		3
NOAA.....		
	Deck	Engine
Miscellaneous shipping (5):		
Chappaquidick Ferry, temporary.....	1	
Salty Dog, scuba diving charter boat captain.....	1	
Ogunquit Ferry, temporary.....		1
Lobster fishing.....		1
Isleboro Ferry.....		1
Shoreside:		
Marine related (10):		
Bethlehem Steel loop program.....		4
Westinghouse.....		1
Todd Shipyard.....		1
Ingalls Shipyard.....		1
Electric Boat, General Dynamics.....		2
Bull & Roberts.....		1
Nonmarine related (5):		
Northeast Constructors.....		1
Brown Paper.....		1
Georgia Pacific.....		1
Health Spa.....		1
Wyman Freezing Plant.....		1
U.S. Government (4):		
U.S. Navy.....	2	1
U.S. Coast Guard.....	1	
Foreign students (graduates): Iranian.....	8	

1974 GRADUATING CLASS

	Deck	Engine
Seagoing:		
American Export Lines.....	1	6
American Trading & Transportation.....		2
Atlantic-Richfield.....		2
Bethlehem Steel, Great Lakes.....		1
Cities Service.....		3
Cleveland Cliffs, Great Lakes.....		1
Exxon.....	3	8
Getty.....	1	
Gulf Oil.....	3	3
Hanna Mining, Great Lakes.....		2
Indian Oil.....		1
Inland Steel, Great Lakes.....		1
Interlake Steamship, Great Lakes.....		2
Lockport Tug.....		1
Mobil Oil.....		1
Mobil Oil, Inland Fleet.....		2
Moran Towing.....		2
Sheridan Transportation.....		1
Sun Transport.....	5	2
Texaco.....		3
Tidewater Marine.....	2	
Unions (MEBA, M.M. & P.).....	2	1
United States Steel, Great Lakes.....		1
Marine related:		
Bath Iron Works.....		1
Bechtel Instrument.....		1
Bethlehem Steel Loop Program.....	1	8
Carrier Corp.....		2
Factory Mutual Engineering.....		1
General Dynamics.....		1
General Electric.....		3
Great Lakes Steel Co.....	1	
Robert Conrad Research Laboratory.....		1
Santa Fe Drilling.....	3	
U.S. Coast Guard.....	4	
U.S. Marine Corps.....	1	
U.S. Navy.....	1	
Other:		
Travel.....	1	1
Hospitalized.....		1
Racing sailing.....	3	
Restricted license.....		1
No license.....		4
Iranians.....		3
Other.....		7
Total.....	32	84
Cumulative total (116):		
Seagoing.....	17	46
Marine related.....	11	18
Other.....	4	20
Total.....	32	84

¹ U.S. graduates 80, 76 employed.

1973 GRADUATING CLASS PLACEMENT

Company	Number hired	
	Engine	Deck
Seagoing:		
1. Alcoa.....	1	
2. American Canadian Lines.....		1
3. American Export Lines.....		1
4. American Trading & Production.....		1
5. Bethlehem Steel (Great Lakes).....	1	
6. Cleveland Cliffs (Great Lakes).....	6	
7. Dillingham Corp. (Hawaii).....		1
8. Ford Motor Co. (Great Lakes).....	3	
9. Getty Oil Co.....	1	
10. Gulf Oil Corp.....	3	
11. Hanna Mining (Great Lakes).....	2	
12. Interstate Oil Transport.....	1	2
13. Kinsman Marine (Great Lakes).....		4
14. Military Sealift Command.....	1	
15. Mobil Oil Corp.....	2	3
16. Moran Towing.....		1
17. Offshore Logistics.....	3	4
18. Red Stack Towing.....	1	1
19. Texaco.....	1	
20. Thomas Marine.....	2	3
21. Tidewater Marine.....	1	2
22. United States Steel (Great Lakes).....	7	
23. Union companies (MEBA District II/MMP).....	7	12
Marine related:		
1. Bath Iron Works.....	1	
2. Bethlehem Steel Loop Program.....	3	
3. Brown & Root.....	1	
4. Carrier Air Conditioning.....	1	
5. General Dynamics.....	2	
6. General Electric.....	3	
7. Maine Yankee Atomic.....	2	
8. New Jersey Power.....	1	
9. Seatrain Shipyard.....	1	
10. U.S. Coast Guard.....		1
11. U.S. Navy.....		1
Other:		
1. Graduate school.....	1	1
2. Other.....	8	4
Total (110).....	67	43

CALIFORNIA MARITIME ACADEMY RESPONSE TO MRS. SULLIVAN'S QUESTIONS

Mrs. Sullivan. I wish each of you Superintendents present at the table would answer these questions. There are three or four of them. One is, are all of your graduates required to sit for the Coast Guard Licensing examination, and if not, how many do, in fact, take those examinations?

All California Maritime Academy graduates are required to take the Coast Guard licensing examination. They must pass the examination to be eligible to receive their degree. In the last five years only one graduate (1974) has not yet passed the license examination.

Mrs. Sullivan. That is what I was going to ask. Is it possible for a student subsidized by the Government to graduate from one of your schools and elect not to take the Coast Guard examination?

No. All graduates must pass the license examination to obtain their degree and to graduate.

If you would like to analyze this and give a fuller statement later, that is fine, but just off the cuff, do you feel it is a good examination or should it be improved?

The Coast Guard examination, as Admiral Kinney stated at the hearing, has been converted from essay type answers to multiple choice type answers. Apparently the change caused a temporary problem for many candidates in 1975. The Coast Guard has been revising those questions which gave the students unforeseen problems. This is a natural process of adjustment. It is a good examina-

tion; it is fair; it covers the necessary subject matter; and it is continuously being improved.

My last question is, and I would like to have it for the record, and you probably could not give it to me now, but how many of your graduates who obtain licenses are placed on merchant marine ships as officers?

The California Maritime Academy employment statistics for the years 1972-75 were forwarded to the Chairman of the Committee on Merchant Marine and Fisheries by my letter of 11 December 1975. An additional copy has been enclosed for your convenience. A summarization of this data indicates that 230 graduates were employed as follows: 201 (87%) at sea in the maritime industry or the armed forces; 176 (77%) at sea; 18 (8%) in the armed forces; 27 (12%) in the maritime industry ashore; 7 (3%) in other industries one (0.4%) unemployed.

Of the total number of CMA graduates, approximately 15 percent are serving on active duty in the United States Navy or Coast Guard; 35 percent are sea-going officers in the Merchant Marine, many of them captains and chief engineers; 20 percent are working tugboats, the fishing fleet, in rivers and harbors, and as pilots, or in maritime related industries ashore; and a whopping 35 percent are in managerial positions within the maritime industry ashore after serving at sea for many years. These latter include the Vice President of Sloss Steamship Company, the U.S. Fleet Manager of Chevron Shipping Company, many port captains, port engineers, marine managers, etc.

Mrs. Sullivan. If you have these figures on some past graduating groups, I think it would be helpful so that we want to know if we are underproducing or overproducing, so that we have a more intelligent way of measuring.

Employment prospects are excellent for our graduates for the next twenty years. The current boom in the West Coast offshore oil industry virtually assures a steady demand for our graduates. The flow of oil from Alaska to the West Coast ports is expected to increase the demand for our graduates even more. Whereas, the demand for licensed officers in 1975 equated to the size of our graduating class; by 1980 we estimate that our planned yearly graduating class of 98 will fall short of meeting West Coast Maritime Industry requirements.

CALIFORNIA MARITIME ACADEMY EMPLOYMENT STATISTICS

Year of classes	Number of graduates	Percent reported	Percent U.S. Merchant Marine, or Armed Forces	Percent shipping	Number Armed Forces	Percent Armed Forces	Number industry related
1972.....	61	84	78	71	4	7	9
1973.....	61	82	86	70	8	16	3
1974.....	52	100	96	91	2	4	2
1975.....	56	100	89	82	4	7	1

Physical disability, since employed.

Year of classes	Percent industry related	Number other industries	Percent other industries	Number unem-ployed	Percent unem-ployed	Total reported	Unknown
1972.....	15	2	3	0	0	98	2
1973.....	6	3	6	0	0	98	2
1974.....	4	0	0	1	2	100	0
1975.....	2	2	4	1	2	100	0

Physical disability, temporary, since employed.

Employment, class of 1975 as of November 30, 1975

Oil companies -----	6
Tug companies -----	17
Fisheries -----	0
Shipping companies -----	2
Ocean research -----	1
Military Sealift Command -----	12
U.S.A. Corps of Engineers -----	2
U.S. Navy -----	2
U.S. Coast Guard -----	2
Foreign flag vessels -----	1
Marine Industry Ashore -----	4
Unemployed -----	1
Total graduates -----	56

THE GREAT LAKES MARITIME ACADEMY RESPONSE TO MRS. SULLIVAN'S QUESTIONS

Questions. One is, are all of your graduates required to sit for the Coast Guard licensing examination, and if not, how many do, in fact, take those examinations?

That is what I was going to ask. Is it possible for a student subsidized by the Government to graduate from one of your schools and elect not to take the Coast Guard examination?

Answer. Prior to making the Coast Guard license examination a requirement of the program we had no cadets finish the program and refuse to write the Coast Guard exam. Your inquiry at the December 3 hearings prompted me to seek institutional and Coast Guard approval to make the exam a requirement. This has been done so I anticipate that all cadets from this Academy will write for the Coast Guard license for which they have prepared themselves.

Question. The third question is what is your opinion of the present Coast Guard examination?

Answer. We had our share of transitional problems from essay to multiple choice but those are behind us. It is my opinion that the new format is capable of determining knowledge and ability more accurately than the old.

Question. My last question is, and I would like to have it for the record, and you probably could not give it to me now, but how many of your graduates who obtain licenses are placed on merchant marine ships as officers?

Answer. I am enclosing our Annual Report of 1975 to the Great Lakes Maritime Academy Board of Visitors. Pages 1, 2 and 3 provide all the statistical data needed to satisfy this question. (The report was placed in the committee's files.)

Mr. DOWNING. Mr. Emery, did you have a brief question?

Mr. EMERY. Before I pose a question to the witnesses, do I assume you will be returning this afternoon to continue questioning?

Mr. DOWNING. I had hoped that we could complete now.

Mr. EMERY. In which case I would like to ask permission to pose some questions in writing and ask that they be included in the record.

Mr. DOWNING. Without objection, that will be done, and you may give them your written questions.

[The following was received for the record:]

NORTHWESTERN MICHIGAN COLLEGE,
DEPARTMENT OF MARITIME TRAINING,
THE GREAT LAKES MARITIME ACADEMY,
Traverse City, Mich., December 16, 1975.

Congressman EMERY,
Cannon House Office Building, Washington, D.C.

DEAR CONGRESSMAN EMERY: I am answering your letter of December 8, 1975 with the following:

Question. A point I feel should be commented upon on discussions of graduates employed in the industry is that the question we should be asking is how many academy graduates seek jobs in the industry and are denied employment by the major maritime unions, such as the MEBA and MM & P, who control the bulk of officer billets on Federal subsidized vessels. Would you gentlemen care to comment on this situation?

Answer. In the case of the Great Lakes Maritime Academy, I know of no graduate that has been denied employment by the maritime officer unions on the Great Lakes.

Question. I would also like you gentlemen to reiterate your comments on Sec. 2 of H.R. 10413, as I think the effect of your responses was not really felt by the committee. Would you suggest this section be amended or dropped in further consideration of the bill, and what purpose, if any, do you feel this section serves?

Answer. I don't believe this section best serves national interests in an emergency. I would think that any and all facilities would be called upon if needed.

Question. The problems and expense of training vessel operation have only been touched upon and I feel because the training vessel is such a major part of your programs and budgets that you should have an opportunity to detail these problems and offer solutions at this time. In your responses please indicate what benefits other than the obvious training and aspects do the training ships provide?

Answer. The Great Lakes Maritime Academy being so new hasn't had the experience to be able to comment on the economic impact of operating a training vessel. Our Cadets meet all shipboard requirements (270 days) aboard commercial vessels.

Question 1. How many of your graduates have been permitted to join the MEBA since 1970?

Question 2. How many MEBA school graduates would you estimate have been permitted to join the MEBA in this same time period?

Question 3. How does this apparently discriminatory system work?

Question 4. How is the MEBA school financed and how are your schools financed?

Answer 1 to 4. MEBA on the Great Lakes is District #2. Our graduates have been permitted to join.

Question 5. Please comment on a law which states a certain percentage of ship's officers on subsidized American vessels must be reserve officers in the U.S. Navy. Do your graduates receive reserve commissions? Do those of the MEBA School? Please estimate if possible how many jobs that should be held by reserve officers are being held by those unqualified to hold commissions in the reserve, but at the same time are members of a union controlling the manning of vessels subsidized by American citizens, many of whom, although more than qualified, are denied employment on these same vessels?

Answer. We are not heavily involved with subsidized vessels on the Great Lakes. My graduates do not hold reserve officer commissions. For these reasons, I am unable to respond to the balance of your question.

Question 6. One last comment please on the failure of industry management to rally behind you. If your graduates are as qualified as we have been led to believe, why don't the companies that hire such young officers stand up for the sources of future captains and chief engineers?

Answer. The Great Lakes Industry has supported the Great Lakes Maritime Academy to the point where it leaves nothing to be desired. I haven't asked this cooperation as far as this legislation is concerned.

Respectfully submitted,

GEORGE B. RECTOR, *Director*

SUPPLEMENTAL QUESTIONS FOR THE RECORD, DIRECTED TO RADM ROGERS,
PRESIDENT OF THE MAINE MARITIME ACADEMY, BY CONGRESSMAN EMERY

Question 1. A point I feel that should be commented upon in discussions of graduates employed in the industry is the problem of academy graduates who seek jobs in the industry and are denied employment by the major maritime unions, such as the MEBA and MM&P, who control the bulk of officer billets on Federal subsidized vessels. Would you care to comment on this situation?

Answer 1. While there are no records to show how many graduates seek jobs aboard ships under contract with MM&P and MEBA District 1, records do exist that show that prior to 1970 at least 50 per cent of graduates traditionally shipped out through these unions and since 1970 virtually no graduates have found regular employment through these unions. In the case of MM&P the books have been closed in order to allow attrition to thin the ranks of union membership in keeping with the decreased number of ships and jobs in the post Viet Nam period. We cannot claim discrimination since it appears that the closed books apply to all new applicants regardless of source. There is a provision whereby an applicant can pay a fee of \$75 and thereby standby in the union hall hoping that an opportunity will arise where no union member is available or will accept. It is very costly for a young person to spend weeks in the standby category in a big city away from home for the slim chance of a one trip job. If an applicant gets an assignment, he must leave the ship when it returns from that particular trip and return to the hall to repeat the waiting process. This process could go on for years with no assurance that an individual could even earn enough to meet basic living expenses. The specific complaint against the MM&P is that a procedure has not been developed to allow even a small number of new members to join the union each year. It is felt that this could be done by creating incentives for older members in their 60s and 70s to retire. Also, we are concerned that their rotational shipping plan for 3rd and 2nd mates borders on unsafe practices.

The situation with MEBA is entirely different. Since this union has established its own school, group shipping rules were established which place graduates of the Calhoon school in Group 2 and graduates of the state and federal academies in Group 4. A Group 4 member cannot join the union as the Group 2 individuals can, but must acquire 200 days of sea experience in order to move up to Group 2 and union membership. Since the applicant is not allowed to gain the necessary sea experience, he is effectively blocked from a job and union membership. This is all under the guise of seniority wherein the Calhoon school student earns seniority as a student whereas state and federal academy students cannot earn seniority as students. A series of comments on the application of MEBA District 1 group shipping rules to graduates of the federal and state academies, prepared by Lt. Howard A. Thor of California Maritime Academy is attached at Appendix I.

Question 2. I would also like you to reiterate your comment on Sec. 2 of H.R. 10413. As I think the effect of your response was not really felt by the committee. Would you suggest this section be amended or dropped in further considerations of the bill, and what purpose, if any, do you feel this section serves?

Answer 2. In Reference to Section 2 of H.R. 10413, I would like to elaborate further on the comments placed in the record at the 3 December 1975 hearing. No one wishes to dispute the fact that the union schools are capable of turning out trained officers on an accelerated basis in the time of emergency. However, it must be realized that the state academies have an equal and perhaps greater capability and flexibility to accomplish the same. I believe you need only go to the record of past accomplishments in this matter during WW I and WWII, when our colleges and universities, as well as the federal academies, were quite easily able to accelerate their training programs to provide our expanding military forces

with trained officers. Today with the shoreside campus along with our training ships, the state academies possess an even greater flexibility to handle additional classes of students for training on an accelerated basis to meet emergencies. Again, these remarks are not made to deprecate the capabilities of the union school, but only emphasize that the state academies have an equal or perhaps greater flexibility to accomplish the same. Supplemented by a few faculty members, our capability and facilities are in being now and our response could be immediate. As an example, Maine Maritime Academy could immediately accommodate 300 students in short term special programs in addition to accelerating the program for students in our regular program.

Question 3. Since the problems and expense of training vessel operations have only been touched upon and because a training vessel is such a major part of your program and budget I feel you should have an opportunity to detail these problems and offer solutions at this time. Would you please indicate what benefits other than the obvious training aspects does a training ship provide?

Answer 3. The state academy system initially came into being as schoolships where the ship represented the school. A variety of factors including government regulations have made it necessary for these schools to have shoreside facilities with the ship being the principal laboratory for practical training. The federal government pays for shipyard type maintenance and the states are required to provide for daily upkeep, purchase all consumables, and pay all operating costs. Students are required to assist in the maintenance of the ship and actually operate it during cruises under the supervision of licensed officers. From a training point of view it represents an excellent system.

From a financial point of view the training ship has become the principal cause of our economic woes. The state can no longer shoulder the total operating cost of these ships and without immediate relief the quality of the training cruises will suffer to the point of making their operation difficult to justify. During the past ten years the cost of operating the Maine training ship has increased from \$250,000/year to over \$750,000 per year. Since there are not enough available berths on commercial ships for all state academy cadets, training ships are essential. The immediate economic solution is for the federal government to provide the oil for the training ships just as shipyard maintenance is presently provided. The next step is for the government to build two new training ships and operate them to provide at sea training for all maritime students on a rotating basis. This concept would require the federal government to provide a nucleus crew to be supplemented by the academy faculty during cruises. To relieve the burden on the taxpayer, it is recommended that Congress consider a tax on shipping operations that would be dedicated to training. An alternative solution to all of the above would be to require the incorporation of cadet bunkrooms for eight to ten cadets on all new U.S. flag ships, especially those built with construction differential subsidies. This system would be the least expensive and in the long run the most effective means of providing at sea training, because of the variety of training opportunities. With this system a reserve fleet ship could be stationed at the individual academies where students would get excellent training maintaining it in a ready condition for emergency use.

Question 4. How many of your graduates have been permitted to join the MEBA since 1970?

Answer 4. Our alumni records do not show that any engineering graduates out of a total of 439 from the classes of 1970 through 1975 have been admitted to membership with MEBA District 1.

Note: The MEBA District 1 and MEBA District 2 are administered as completely separate entities. District 1 is the union that has effectively manipulated seniority rules to put Calhoun school graduates in Group 2 and all academy graduates in Group 4, which is strictly an application status.)

Question 5. How many MEBA school graduates would you estimate have been permitted to join the MEBA in this same time period?

Answer 5. This information is only available from the union. Technically speaking all Calhoun school graduates are eligible to join the MEBA District 1 union by virtue of being placed in Group 2 of their shipping rules and Group 2 personnel must be union members.

Question 6. How does this apparently discriminatory system work?

Answer 6. As explained in Question 5 above, the MEBA District 1 shipping rules need further study. Discrimination occurs by means of the arbitrary placing of Calhoon school graduates in Group 2 and all academy graduates in Group 4.

Question 7. How is the MEBA school financed and how are your schools financed?

Answer 7. The MEBA District 1 Agreement provides information on the primary source of funding. Pages 80-84 covering this information are provided with the statement as Appendix II. Note that all ships under contract with this union are assured \$1,000 per year for the training plan. Also note the provision wherein the union can require the ship to sail with a cadet in lieu of a day engineer and with the company paying full contract wages with all but the current cadet wage of \$317.10 going to the union training plan. In addition, contract negotiations provide for sizeable additional payments from the operating companies to the training plan. Although Mr. Calhoon's statement before the Committee on Merchant Marine and Fisheries on 10 December 1975 denies any federal monies to his school, this is another deceptive answer. The congressional study conducted under the chairmanship of Congressman Fred B. Rooney verifies that 73% of the funding for the Calhoon school comes from the federal treasury. This comes about through a provision in the Merchant Marine Act of 1970, which provides shipping company reimbursement under the operating differential subsidy formula for payments made for training that results from negotiated contracts.

Question 8. Please comment on a law which states a certain percentage of ship's officers on subsidized American vessels must be reserve officers in the U.S. Navy. Do your graduates receive reserve commissions? Do those of the MEBA schools? Please estimate if possible how many jobs that should be held by reserve officers are being held by those unqualified to hold commissions in the reserve, but at the same time are members of a union controlling the manning of vessels subsidized by American citizens, many of whom, although more than qualified, are denied employment on these vessels?

Answer 8. The law requiring that a certain percentage of ship's officers on subsidized American vessels must be reserve officers in the U.S. Navy is meaningless so long as union hiring practices preventing employment of trained reservists are condoned. This practice is possibly a result of the shortage of trained officers available for employment during the Viet Nam emergency, but it may be even more long standing than that. The continued existence of such necessary escape clauses, which presume that qualified reservists are not available for service, is neither necessary nor a valid contention today. The very definition of emergency presumes it was not foreseen. The fact that we do not foresee an emergency situation in our maritime service today, does not foreclose the possibility of one coming tomorrow. If an emergency does arise, we may not have a year and a half to train officers, crews and build new ships. The law requiring that merchant officers be naval reservists is valid. It arose out of our unreadiness in past emergencies. It is equally valid today and it should be enforced.

The students at our state academies are required to take naval science courses in addition to their regular courses. They are examined as to their qualifications for reserve commissions and the majority receive them. All midshipmen receiving subsidies from the Maritime Administration are required to apply for and accept the reserve commission, if it is offered. Additionally, a number of the state academies now are the sites of NROTC training programs by which graduates enter active naval service upon graduation.

We do not have information to respond to the query about numbers of ship's officers today employed who are not qualified to hold reserve commissions. It is possible that the generality of officers aboard our ships today are qualified. However, there is some indication that few, if any, of our subsidized vessels fly the reserve pennant. These questions perhaps should be directed to the ship owners and operators as well.

Question 9. Please comment on the failure of industry management to rally behind you. If your graduates are as qualified as we have been led to believe, why don't the companies that hire such young officers stand up for the sources of future captains and chief engineers?

Answer 9. I feel that there is a reluctance amongst ship operators to intrude on what they interpret as an argument between the state and federal academies and a particularly powerful union leader. A union leader can very readily create situations that can be very costly to a ship operator, so the operator is reluctant to rock the boat. This is a sad situation in our country that prides itself on freedom in its many forms. Although the ship operators are reluctant to step forward in this matter, I am confident that a congressional questionnaire directed to them would be most enlightening and useful to the committee.

SUPPLEMENTAL STATEMENT BY REAR ADM. ROGERS

The maritime industry and our country suffer because of adversary relationships that have been allowed to develop amongst rival maritime unions, unions and management, and other training institutions. It is time for Congress to examine the laws which foster this unhealthy relationship. Power corrupts and the basis of these adversary relationships is the abuse of power. Unions came into being to counteract management abuse of power and Congress has protected union growth and practices by providing immunity from certain laws including the anti-trust statutes. Let us take the case of Mr. Calhoun and the MEBA District 1. He justifies much of his hostility toward the academies on the basis that the academies are graduating more engineers than the industry can absorb. At the same time he continues a school that was supposed to meet emergency needs during Viet Nam war, but didn't graduate a student until the emergency need for officers was over. Now for the past several years, while qualified engineers are seeking employment, he restricts membership in his union and even requires ships to sail with one of his cadets in lieu of a licensed engineer with the company paying to the training plan the absent licensed engineer's wages. This use of power for narrow purposes cannot fail to create animosity among the several academies and their graduates. One can understand Mr. Calhoun's reluctance after a period of time to admit new members who may be critical of his administration, into his union. Actually our hostility is perhaps misdirected, because Mr. Calhoun operates within the special privilege of the law provided by Congress. That is, through the Merchant Marine Act of 1970, Congress has assumed financial support for the union to operate the training school. By virtue of closed shop legislation, the union can control employment opportunities on ships under contract. Finally, the union controls the pension plan which keeps the membership in line. This operation represents a monopoly that violates our concepts of fair play and equal opportunity, but it is legal because Congress has exempted the unions from anti-trust laws. Is it any wonder that the maritime industry continues to flounder when our laws encourage leaders to jockey for power rather than to work cooperatively as a team member for the good of the industry? Is it any wonder that Mr. Calhoun states that there is no justification for the federal or state academies?

APPENDIX I

To: Rear Adm. F. T. Williamson.

From: Lt. Howard A. Thor.

Subject: Declining employment opportunities for Academy graduates.

(1) The MEBA plans to fully institute its Group Shipping System on either January 1, 1971 or on April 1, 1971. at the present time, the MEBA membership is divided into two groups: (a) full-book members and (b) applicants. All engineer graduates of the 1969 class who shipped on MEBA ships were given the status of "applicant" and will continue to retain that status at least until the Group System is instituted next year. All engineer graduates of the present graduating class will also be classed as applicants.

(2) When three priority groups (Groups 1, 2 and 3) are established next year, all MEBA members who now have full-book status will be placed in

Group No. 1. All applicants who have accumulated 200 days of sea-time on MEBA-contract vessels will be eligible to apply for Group No. 2.¹

There will be a fixed quota established for those allowed to enter Group No. 2. This will be approximately 25% of the number of jobs that the MEBA has under contract. Eventually it is planned to have a one-to-one man-to-job ratio for Group No. 1. Recently it was decided that priority for entry into Group No. 2 would be determined by the 200th day of sea-time on an MEBA-contract vessel.

(3) From observation of recent events, it is almost certain that the year's sea-time that the cadets of the MEBA Calhoun School in Baltimore accumulate while cadets will be considered as sufficient to qualify them for Group No. 2 status immediately after they graduate. The rationalization for this is that as cadets they are actually performing the work of a licensed engineer (i.e. the Day-working Third Engineer) and they are employed on MEBA-contract vessels. In this regard, it should be kept in mind that the MEBA usually places an MEBA Cadet aboard a cargo vessel in place of a Day-working Third Assistant. This practice started during the Vietnam War as a means of diluting a scarce labor supply. However, the practice has continued into the present, even though there is no longer any shortage of engineers.

(4) In a declining labor market, such as we now have in the maritime industry and will continue to have for some time in the future, there will be few opportunities for academy graduates to obtain the "200 days sea-time on MEBA-contract vessels" which would enable them to obtain Group No. 2 status and some assurance of employment. Priority for available jobs will go to those in Group No. 1. Any left-over jobs will then go to those in Group No. 2 which in a few years will be made up mainly of Calhoun (MEBA) graduates, if the MEBA is successful in its maneuver to grant them preference in entering Group No. 2. During "normal times" in the maritime industry, there are far more qualified men than jobs. Academy graduates could not, therefore, expect to ship out on an MEBA-contract vessel except possibly as a vacation--relief during the summer months. Since there is a quota set for the number in Group No. 2, this means that they would not be assured Group 2 status, even after obtaining the minimum 200 days (which might take several years of vacation-relief work).

(5) Possibly indicative of a trend in the MEBA was a motion that was introduced in a S.F. meeting in 1969 which would have instructed the National MEBA to take action to close down the State and Federal Maritime Academies. The arguments expressed were that: (a) Academy graduates often take on a "hippie" appearance aboard ship, and (b) MEBA cadets make a career of the sea while Academy graduates remain in the industry for only a few years. The motion was defeated, but the vote was uncomfortably close. Not wanting to publicize this ill-timed motion, the officials omitted it from the minutes that were read at the meetings of all the other branches.

(6) In the June 1970 meeting of the S.F. branch, the same motion was placed before the membership. This time it passed by a vote of 58 to 49. However, the motion will probably be ruled out of order on the grounds that it violates Section No. 1 of the MEBA collective bargaining contract, which prohibits the MEBA from discriminating against Academy graduates who apply for MEBA membership. More important as possible reasons for ruling it out of order are the following: (a) it is premature in that the implementation of the Group System is still six months in the future, (b) it would invite lawsuits and needlessly focus possible attention on the MEBA in an unfavorable manner, and (c) it is redundant since most Academy graduates will henceforth become perpetual members of Group No. 3 if the graduates of the Calhoun School are given priority for Group No. 2.

¹ NOTE.—This rule was recently changed. Previously, an applicant made application for MEBA membership prior to obtaining employment. Also, the resolution that established the Group System clearly states that one of the necessary conditions for advancement from Group 3 to Group 2 is 200 days of covered employment, which includes vacation time as well as sea-time. In addition, two weeks ago it was decided that an applicant is no longer required to make down-payments on his \$1,000 initiation fee while employed, but will be required to submit the entire fee after acquiring 200 days of sea-time.

(7) The arguments used by those favoring the motion were similar to those used last year except that this time the "hippie argument" was not used, possibly because in the interval, the Calhoun School has had time to graduate several hundred young engineers who, in turn, have had sufficient time to acquire long hair, sideburns; beards and other items of appearance characterizing so many of their age-group today. With respect to the argument that few Academy graduates sail after they have satisfied the Naval Reserve requirements (6 months a year for 3 years), not enough time has elapsed to determine if the graduates of the Calhoun School will have a better record. Already there is evidence to indicate that given the present set of conditions (i.e. that priority in employment is not given any one group of new entrants) then it is unlikely that the percentage who obtain Chief Engineers' licenses will be much different between the two groups. However, this problem by the administration of the MEBA's Calhoun School is noted and they are now taking steps to correct the situation.²

(8) The MMP (deck officers) is currently circulating a referendum on a new constitution, one feature of which would close the MMP's membership books. Although this has created considerable alarm at the various academies, the impending situation in the MEBA poses a far greater threat with respect to the limitation of job opportunities for academy graduates. Basically, the only significant difference between the proposed closing of the MMP's membership roles and the present MMP Group System, which has been in existence since the early 1960's, is that any jobs left over after the full-book members have had an opportunity to make a selection will go on the "open board." With the number of full-book members eventually curtailed to bear a fixed relationship (one-to-one) to the number of jobs, these "open jobs" will occur mainly during the months of June, July and August and will be mostly vacation-reliefs. At the present time, these jobs are taken by Academy graduates who become Group IV on the West Coast and Group III on the East Coast upon graduation. With the MMP's membership books closed, Academy graduates would presumably become "applicants," or "trip-card holders" or "probationary members" or some other such non-member designation. If a ship was going to remain in port for several days the MMP might leave an "open job" on the board until sailing day before permitting an "applicant" to take it. The important thing is that the job will be filled by someone, and if there are not enough full-book members to handle the summer relief, then non-members will take these jobs. Thus, the proposed MMP system differs very little from their present Group System.

The MEBA on the other hand, appears ready to use its Group System to insure the graduates of the Calhoun School of priority in job opportunities over all other entrants into the industry. The MMP has no such school for cadets at the present time and it is unlikely that it will go into the business of training cadets in the foreseeable future.

(9) In the past, CMA graduates suffered a competitive disadvantage in that they graduated near the end of July while all the other academies held graduation in May or early June. With the decline in jobs and the drastic change in the MEBA's shipping rules, it becomes *absolutely essential* that we advance our graduation date by two months. On June 16, 1970 and again in June 16, 1971, the vacations for licensed officers will increase, thus increasing the number of vacation-relief positions, which tend to cluster during the summer months. Most of these opportunities will have come and gone by the time our graduation rolls around near the end of July. Advancing the date of graduation will also increase their chances of obtaining a permanent position, which even with the 10-month limit on such jobs for Group No. 3 will mean that they will be employed until the following summer, after taking their vacations. Advancing graduation by two months is the most important step that we could take at this time to help our graduates in meeting the severe employment problems they will face in the future.

(1) Given the government's projections for a maritime work-price in 10 years that is 50% less than the one at the present, perhaps it is time to plan accord-

² Note: If a comparative statistical survey is made five or ten years from now, allowances should be made for unequal job opportunities between these two groups of new entrants in the event that Calhoun graduates are given first preference for jobs.

ingly. Going to a 4-year curriculum to obtain accreditation might serve the function of providing shoreside job credentials for our graduates when the industry cannot or will not provide them with employment. Meanwhile, we leave the job of upgrading the licensed engineers to the MEBA School, which is rapidly expanding in this area as it cuts back in its cadet program. If they can mix cadet training with an upgrading and refresher school for the career officers actually ruling, is it absolutely impossible for a State Academy to similarly provide a needed service to the industry. The West Coast is in critical need of an automation training center to train the many engineers now sailing on automated ships. There are many other areas such as radar, cargo-handling, hydraulics, gas turbines, welding and electronics where a real need exists for training career officers in the merchant marine. We are particularly fortunate in that so far we have few competitors on the West Coast in this area of refresher courses and upgrade training.

NOVEMBER 17, 1970.

From: Howard A. Thor.

To: Rear Adm. F. T. Williamson.

Subject: MEBA discrimination against Academy graduates.

1. In previous reports it was pointed out that the MEBA's Group Shipping System would be used to give preference of employment to graduates of the Union's School in Baltimore. This was supposed to start on January 1, 1971. However, since June 8, 1970, the MEBA has openly given favored treatment to the graduates of the Calhoun School in Baltimore. If the various forms of discrimination outlined below are allowed to continue, all future Academy graduates will be effectively cut off from marine engineering positions aboard 85% of the ships in the American Merchant Marine. (This is the segment that the MEBA has under contract.)

2. On June 9, 1970, the CMA graduating class of engineers was informed by a representative of the MEBA that they could no longer make application for membership in the union as members of previous classes had done. (It is significant that this decision was made by the National MEBA on June 8, 1970, which was one day previous to the scheduled appearance of the MEBA's visit to CMA to answer questions from midshipmen on the union's shipping rules.) Instead, they would be placed in a non-member "available for employment" (A.E.) status, which at the present time puts them in the fourth and last priority group with respect to job opportunities through the union's hiring hall. On the other hand, cadets graduating from the MEBA School were allowed to apply for membership in the MEBA and were placed in Group III. Until September 8, 1970, the S. F. MEBA Branch treated Group III and the fourth (or A.E.) group alike and registered and shipped them from the same Group III Shipping List. Then, on September 8, 1970, all new entrants into the MEBA, who were not graduates of the Calhoun School, were placed on the A.E. (or fourth) group shipping list. Needless to say, their job prospects deteriorated immediately. (In actual practice, some of the MEBA branches, (e.g., Los Angeles) have not yet separated the A.E.'s from the Group III list.)

3. The 1970 graduating class was also told by the MEBA representative that they would need "200 days of sea-time on their license" in order to advance from Group III to Group II, even though the Group Shipping Rules specify that "200 days of covered employment" was required. (Covered employment not only includes sea-time, but also covers night and week-end port relief work and vacation time.) After the CMA class graduated in late July 1970, the rules were again changed to require "200 days of sea-time in one calendar year." This was contrary to the promise made by the MEBA representative to the classes of 1968, 1969, and 1970, and would adversely affect the ability of members of these classes to advance from Group III to Group II. Suddenly, on November 9, 1970, the National MEBA changed both of the above amendments and reverted back to the original language of the Group Shipping Rules. The November 9, 1970, directive states: "that an applicant must have 200 days of covered employment, subsequent to the date of his application for membership, in order to qualify for Group II status."

4. The implications of the above directive become evident when one recalls that since June 8, 1970, only the graduates of the MEBA's School in Baltimore have been allowed to become "applicants for membership". All others since that date have been classed as being "available for employment" (A.E.'s), paying a "service fee" instead of the regular membership dues. Thus, it appears that the MEBA will now try to exclude from Group II even those A.E.'s, who by some miracle, might in the future be able to accumulate 200 days of covered employment. Not being permitted (since June 8, 1970) to become applicants for membership, the Academy graduates will now find it impossible to advance into Group II. However, as will be seen in the next few sections of this report, much of this has now become academic because few if any of the newly-licensed engineers (except those who matriculated from the Calhoun School) will be able to acquire 200 days of employment.

5. For many months, we have heard reports that starting on January 1, 1971, the Calhoun School engineers would be placed in Group II immediately after graduation and that all those who have obtained a Temporary Third Engineer's license from the school any time since it graduated its first group in late 1968, would similarly be placed in Group II (until the Group II quota was filled), regardless of whether or not they had accumulated the necessary 200 days of covered employment. The basis for moving Calhoun cadets directly into Group II will undoubtedly be an interpretation of the phrase "covered employment" to mean that MEBA cadets obtained the necessary 200 days on MEBA-contracted ships *while they were still cadets*. (It should be noted that while Kings Point cadets are also placed aboard MEBA-contract vessels during their year at sea, they are not covered by the MEBA agreement and thus technically are not in "covered employment".) On November 13, 1970, it was discovered that the National MEBA had decided not to wait until January 1, 1971, to carry out this discriminatory move. On that date, the S. F. branch, acting on the directive of November 9, 1970, from the National, issued a Group II shipping card to a September 1970 graduate of the Calhoun School who did not have a single day of covered employment as a *licensed marine engineer*. After paying his \$1,000 initiation fee, he was immediately moved from Group III to Group II. (Contrast this quick service with the cases of several 1968 CMA graduates who have over 200 days sea-time on their license, but who have had to wait over 6-weeks to even get their applications for Group II looked at.) In other words, this fortunate young man and all those who will soon follow him from the Calhoun School into Group II until the quota is filled, will be *two* priority groups ahead of all other new entrants into the industry.

6. The requirements for advancing from A.E. (or fourth group) status to Group III are somewhat vague at the present time. However, a recent directive from the National MEBA stated that this move would not require any sea-time, but priority would be given on the basis of the date of application for Group III. It is expected that the gates to Group III will be opened around January 1, 1971. In the event that Academy graduates are then admitted to Group III, they will still be one priority rating below the Calhoun graduates, all of whom will be in Group II by that time. In a tight labor market such as the one faced in the present, this could spell the difference between working and not working.

7. Nothing in this report is intended to be critical of the legitimate union hiring hall concept or of a Group Shipping System that is non-discriminatory with respect to equal treatment for all new entrants. It is unfortunately true that the CMA deck graduates of 1970 fared even worse than their engineer classmates. Of course, this was in accordance with the historical difference in job prospects for the two groups, the mates having less transferability of their marine skills to shoreside occupations and much less turnover in jobs than the engineers. However, the engineer graduates held the advantage only during the brief flurry of summer vacation-reliefs and few, if any, of the 1970 CMA engineering grads have been able to get a ship out of S.F. since the A.E. (fourth group) list was established on September 8, and with the recent institution of wholesale discrimination by the MEBA against the Academies, the CMA deck graduates will have the long-run advantage. If they are still around for next summer's vacation reliefs, they will at least be on an equal footing with all other new entrants. In addition, if the rate of retirement of ships' officers ever increases to the point where it

surpasses the rate of retirement of ships, the Group III mates will be able to sail on their licenses. Unfortunately, this will not be true in the MEBA if the present discriminatory practices are allowed to continue.

8. Three things can be done at the present time: (a) CMA *must* put its graduates in the job market at the same time as the other academies to maximize whatever chances they have for a job on their licenses. Thus, graduation around June 1 (instead of the end of July) will place them in an available for employment position (with the other Academy graduates) at the beginning of the summer vacation relief season, rather than at the end of the season. (b) Unfortunately, the optimum time has long past when an industry-wide conference on maritime officer training would have much hope for success. Nevertheless, such a conference should once again be called and should include all of the licensed-officers unions as well as representatives of the steamship companies, government agencies, and academies. (c) As outlined in the above report, there is now more than sufficient evidence at hand to prove that the MEBA has set out on a policy of discrimination against Academy graduates and appears intent on gaining control over the training of licensed engineers for the entire industry. The February 1970 report of the Maritime Administration indicates that MarAd cannot be relied upon to provide the leadership necessary to put an end to the MEBA's delusions of grandeur in the field of officer training. And the shipping companies are caught between the profit motive and the realities of the collective bargaining process. Therefore, if the Academies are to survive, their administrators and their alumni associations must provide the initiative and take whatever legal action necessary.

[APPENDIX II]

AGREEMENT, NATIONAL MARINE ENGINEERS' BENEFICIAL ASSOCIATION—DISTRICT No. 1, PACIFIC COAST DISTRICT, TANKER VESSELS, 1972-75

* * * * *

MEBA TRAINING PLAN

(m) The Companies have agreed to establish the MEBA Training Plan which is administered by Trustees, half of whom are designated by the Union and half of whom are designated by the Companies. The purposes of the Plan are: training and safety education and similar purposes for the benefit of the licensed engineers covered by the collective bargaining agreements.

It is agreed by the parties hereto, in the event any court of competent jurisdiction shall determine that the establishment or administration of said MEBA Training Plan or any purpose thereof is not consistent with applicable law, the obligation of the Company to continue to make its full contribution shall not be affected or modified in any way whatsoever and the purpose or purposes for which any unspent monies in said MEBA Training Plan and the continuing contributions of the Company shall be expended, shall rest exclusively in the discretion of the Union subject only to the provisions of any applicable law.

(n) There shall be a Cadet-Trainee Training Program. The provisions are as follows:

(1) The MEBA Training Plan has continued the operation of the training school.

(2) High School graduates who are approved as candidates will be sent to the school for a three (3) year training program. This will entail a formal training portion at the Calhoun Engineering School with a sea phase portion which may be completed at any point of time in the program.

(3) The curriculum for the school will be approved by the United States Coast Guard.

(4) Training on the vessel will be accomplished by filling a vacancy existing because of the inability of the Union to fill the job which will be the dayworking Third Assistant or Licensed Junior Engineer. The work to be performed on the vessel will, of course, be confined to work within the jurisdiction of the Licensed Engineers.

(5) The cadet-trainee, while at school and on the job, will be paid two-hundred dollars (\$200.00) per month and, in addition, will be provided with room and

board. While on the job, the cadet-trainee will also receive any overtime he may earn when working such hours that a regular engineer would be entitled to overtime.

(6) The program is to be financed in this manner:

(a) Each Company which is participating in the program is undertaking to pay into the Training Fund an annual contribution of one-thousand dollars (\$1,000.00) for each vessel under contract with the M.E.B.A.

(b) The Companies contribute additional monies which are provided for in the collective bargaining agreements.

(c) When a cadet-trainee is on a job on the vessel, and is being paid by the Company two-hundred dollars (\$200.00) per month, the difference between such sum and what the regular engineer filling the vacancy would have received plus the regular Pension, Welfare and Vacation Plan contributions that would have been paid in behalf of such regular engineer, will be paid over to the Training Plan.

When a cadet-trainee is carried, the payment to the MEBA Training Plan shall be based on wages and Pension, Welfare and Vacation rates in effect as of June 15, 1972.

(7) When the cadet-trainees complete their training and qualify for their licenses, they will be obligated, if seeking jobs through the Union halls, to confine their employment for a period of three (3) years to those companies which participate in this program.

(8) Cadet-trainees who have completed their initial months of school training at the Calhoun Engineering School and are awaiting assignment to a position on a vessel for the sea training phase may be assigned to a vessel where there is no vacancy in any licensed engineer rating when at the time of assignment there is no vessel available which has a lesser complement of licensed engineers than the required manning to which the cadet-trainee as a matter of practical administration could be assigned. A cadet-trainee so assigned to a vessel where there is at the time no vacancy for a licensed engineer shall be paid the same compensation as presently provided under the Training Program, but the employer shall not be obligated to make any other contribution to the MEBA Plans in connection with any such cadet-trainee for the period of his employment on the vessel. The number of applicants to be admitted from time to time as cadet-trainees to the MEBA Training Plan shall be subject to the decision of the Trustees of the Plan. The present rate of admission shall not be increased without the consent of a majority of the Employer Trustees.

The Company agrees that in the event, because of Company policy, it fails to fulfill its contractual obligation to place cadet-trainees, who are in fact in training under the Training Program, on its tankers to fill vacancies caused by missing engineers, then with the Union's written consent to the following substitution for said specific obligation, the minimum required manning scale for all of its tankers covered by this New Contract with a power tonnage of 12,000 or over shall be deemed increased by one (1) additional Third Assistant Engineer.

PARTICIPATION

(p) A "Contributing Employer", "Covered Employees" and "Covered Employment", under the MEBA Pension and Welfare Plan, may include, as determined by the Trustees in accordance with the Rules and Regulations promulgated thereunder but subject to the requirements of and to the extent permitted by applicable law:

(1) Employers who are obligated by the collective bargaining agreement to make the necessary contributions to the Plans in behalf of Covered Employees;

(2) Covered Employees in whose behalf an Employer has been obligated to make contributions which may embrace pensioners who had, prior to retirement, been in Covered Employment;

(3) The MEBA Pension, Welfare and Tanker Vacation Plans which are hereby authorized to make the required contributions as Contributing Employers, in behalf of their respective employees on such basis as may be determined by the Trustees;

(4) The National M.E.B.A. and District No. 1—Pacific Coast District, M.E.B.A. which are hereby authorized to make the required contributions as Contributing

Employers, in behalf of their respective officials, employees, representatives and others rendering contractual services on such basis as may be determined by the Trustees; and

SUPPLEMENTAL QUESTIONS FOR THE RECORD, DIRECTED TO REAR ADM. HARRINGTON, PRESIDENT, MASSACHUSETTS MARITIME ACADEMY, BY CONGRESSMAN EMERY

Question 1. How many of your graduates have been permitted to join the MEBA since 1970?

Reply. As indicated in my written statement for the record, "over the past three years not one graduate of the Massachusetts Maritime Academy has obtained initial employment on a subsidized, deep-sea ship controlled by either the International Organization of Masters, Mates and Pilots or the Marine Engineers Beneficial Association, District 1." Prior to the establishment of a full-time Placement Office at this Academy in 1973 it was not possible to obtain accurate information as to individual job placements. However, reports from some graduates who maintain contact with this Academy indicate that MEBA's "books" were effectively closed to graduates of this school beginning in June 1970. A few graduates have since gained entry to the MEBA union.

Question 2. How many MEBA school graduates would you estimate have been permitted to join the MEBA in this same time period?

Reply. Lacking access to MEBA records, this Academy is unable to answer this question with any degree of reliability. As stated on page 26 of the *Report of the Ad Hoc Committee on Maritime Education and Training*, "no records are maintained by the School (MEBA) on an annual basis regarding its graduates." The 1974 MARAD study on "Deck and Engine Officers in the U.S. Merchant Marine: Supply and Demand, 1974-1984," (pages 33 and 34) indicates that "the output of the Calhoun School reached 205 graduates in 1971, an output level that was reduced in 1972 to 65. In 1973 following a U.S. Coast Guard directive that initiated a three-year curriculum to replace the previous two-year program, only 36 cadets were graduated. Commencing in 1974, the Calhoun school plans to limit its output of engineers to 90 graduates annually." On the assumption that all MEBA graduates joined the union, the figures above reflect that a total of 680 MEBA graduates joined the union and entered the active work force for the period 1971 through 1975.

Question 3. How does this apparently discriminatory system work?

Reply. Briefly, and as I understand it, this system works through a procedure known as the Group Shipping System. Graduates of the Calhoun School are placed in Group III—or Group II—and advised to apply for membership in the MEBA immediately upon graduation. Graduates of the Federal and State academies are placed in a non-member "available for employment" (A.E.) status, which puts them in the last priority group with regard to union membership and job opportunities through the union's hiring hall. I believe that it would be fair to state that since June of 1970 only the graduates of the MEBA School in Baltimore have been allowed to become "applicants for membership" and that all others since then have been classed as being available for employment. In late 1970 the MEBA moved to accept graduates of the Calhoun School into Group II status upon payment of the initiation fee regardless of whether the graduate had served the required sea-time, as stated in MEBA contracts. In other words, graduates of the Calhoun School are one or two priority groups ahead of their Federal or State Academy counterparts in obtaining jobs aboard subsidized ships under contract with the MEBA. In actual practice, the system may vary somewhat from the procedures described above. You may be assured, however, that this is a real problem here.

Question 4. How is the MEBA school financed and how are your schools financed?

Reply. The principal source of financial support for the MEBA school is derived from ship operators' contributions to the union training fund. The amount of the contribution is determined through collective bargaining by union and shipping company officials. The major portion of the contributions is passed on to the taxpayers through a provision of the Maritime Act of 1970 which stipulates that contributions to the Union Schools will be subsidized with Federal dollars through operating differentials. The Massachusetts Maritime Academy

is financed largely from State revenues. In fiscal year 1974 the Commonwealth's share of the Academy budget was \$2,224,242. The Maritime Administration provided \$606,673 for the same period. Data contained on pages 34 and 38 of the *Report of the Ad Hoc Committee on Maritime Education and Training* provides detailed information on the amounts and areas of operating support for academic years 1971-72 through 1973-74. Additionally, page 31 of the report cited indicates Massachusetts' capital investment in this Academy's physical plant.

Question 5. Please comment on a law which states a certain percentage of ship's officers on subsidized American vessels must be reserve officers in the U.S. Navy. Do your graduates receive reserve commissions? Do those of the MEBA school? Please estimate if possible how many jobs that should be held by reserve officers are being held by those unqualified to hold commissions in the reserve, but at the same time are members of a union controlling the manning of vessels subsidized by American citizens, many of whom, although more than qualified, are denied employment on these same vessels?

Reply. I believe that this question refers to Title III, Section 302(g) of the Merchant Marine Act of 1936, which states: "all the deck and engineer officers employed on vessels on which an operating-differential subsidy is paid under authority of Title VI, or employed on the Commission's vessels, after one year of the passage of this Act, shall, if eligible, be members of the United States Naval Reserve." The majority of the graduates of the Massachusetts Maritime Academy receive U.S. Naval Reserve commissions upon graduation. It is my understanding that graduates of the MEBA school do not receive U.S. Naval Reserve commissions. I have no information as to how many potential jobs are now being held by those unqualified to hold commissions in the Naval Reserve.

Question 6. Please comment on the failure of industry management to rally behind you. If your graduates are as qualified as we have been led to believe, why don't the companies that hire such officers stand up for the sources of future captains and chief engineers?

Reply. The position of subsidized ship operators vis-a-vis Federal/State academics and maritime unions is a difficult one, concerning which I can only speculate. Perhaps the operators feel that their bargaining "hand" in contract negotiations with the unions may be weakened if they support the Federal and State academies over the union schools. Perhaps, also, the operator may be intimidated by the possibility of union reprisals in areas directly affecting operational productivity, e.g., slowdowns, or walkouts, if they criticize union hiring practices. In any event, the failure of the subsidized ship operators to take a stand on the issue of the discriminatory hiring practices employed by some unions warrants, in my judgment, a more detailed inquiry into this situation.

SUPPLEMENTAL QUESTIONS FOR THE RECORD, DIRECTED TO REAR ADM. RIZZA,
PRESIDENT, CALIFORNIA MARITIME ACADEMY, BY CONGRESSMAN EMERY

Question 1. A point I feel that should be commented upon in discussions of graduates employed in the industry is the problem of academy graduates who seek jobs in the industry and are denied employment by the major maritime unions, such as the MEBA and MM&P, who control the bulk of officer billets on Federal subsidized vessels. Would you care to comment on this situation?

Answer 1. None of our graduates are permitted to join the unions immediately upon graduation. They can get jobs by registering as "available for employment," or "applicant." In this category they do not pay anything towards the initiation fee, but pay monthly dues amounting to \$300 per year. They can then take jobs "off the open board"—these are jobs turned down by members of Groups 1, 2 or 3, or during vacation periods when manpower may be in short supply. By taking jobs on this basis and continuing to pay dues while sailing aboard Military Sealift Command vessels, some tanker companies, or research vessels, they can then acquire the required sea time and are permitted to join the union.

The system does not seem to be consistent. For example, one 1970 graduate employed by one of the tanker companies did not make Group 1 until January of 1975. By this time he had his first assistant engineer's license.

Annually, 96 percent of our graduates seek employment in the maritime industry. The first choice of this group is to go to sea on large bulk carriers, tankers, Liquid Natural Gas tankers, and modern cargo ships. Five years ago there

were few restrictions, and our graduates joined the unions and competed for available jobs. About four years ago, restrictions were placed on new members joining unions. Many graduates applied, were given a status of "Applicant," paid dues of \$300 per year, and were allowed to take extra jobs not desired by union members. During the past two years, "Applicants" have not been able to get enough work to justify continuing their status. They drift into nonunion jobs or into other lines of marine work in the maritime industry.

On such short notice it is difficult to determine how many graduates are sailing as MEBA members or are still sailing as "available for employment status." Only the most tenacious and determined ones become union members eventually. The others content themselves with sailing on nonunion ships, tugs, research vessels, etc. Others opt for active duty with Navy or Coast Guard; while others find marine shoreside employment in shipyards, marine equipment manufacturers, maritime service firms, etc. An estimate that those who ultimately attain Group 1 membership would be something less than 10 percent.

The LM&P does not categorically deny membership to Academy graduates. A current union by-law does limit total membership to $1\frac{1}{2}$ times the total number of berths available on United States flag vessels. This union rule has temporarily restricted the admission of new members, but whenever openings do arise, Academy graduates are urged to fill them. In recent years, however, there have been few openings in the union jobs.

Employment statistics for the graduating classes of 1972, 1973, 1974, and 1975 were forwarded to the committee by letter on 11 December 1975. The letter is enclosed for your information. Also enclosed are data on United States Coast Guard license examinations for 1973, 1974, and 1975.

Question 2. I would also like you to reiterate your comments on Sec. 2 of H.R. 10413, as I think the effect of your response was not really felt by the committee. Would you suggest this section be amended or dropped in further consideration of the bill, and what purpose, if any, do you feel this section serves?

Answer 2. Section 2 of H.R. 10413 reads in part "... and that sufficient flexibility to fulfill short-term emergency requirements for such officers should be maintained by schools other than the United States Merchant Marine Academy and the State Maritime Academies." This phrase is misleading. During World War II the State Maritime Academies and the United States Merchant Marine Academy deliberately abandoned, temporarily, their degree programs. They turned out qualified Merchant Marine Officers on an emergency basis in less than two years. The State Maritime Academies have the flexibility and capability to fulfill short-term emergency requirements to train and educate individuals for initial licensing in the Merchant Marine as the most cost-effective program to the United States Government. The State Academies are organized and equipped to accomplish short-term emergency training requirements with little or no effort at minimum cost.

Question 3. Since the problems and expense of training vessel operations have only been touched upon and because a training vessel is such a major part of your program and budget I feel you should have an opportunity to detail these problems and offer solutions at this time. Would you please indicate what benefits other than the obvious training aspects does a training ship provide?

Answer 3. The heart of the practical training the midshipmen receive at a State Maritime Academy lies in the training ship. While the training which the midshipmen receive at sea on the ship, and at the Academy when it is utilized as a floating laboratory may seem obvious, it cannot be dismissed so lightly. All the muscle and skills necessary to run the ship on cruise come from the midshipmen, assisted and instructed by the licensed faculty. Coast Guard regulations require a licensed officer on the bridge and another in the engine room. The rest of the watch at sea is made up of midshipmen in training, and the major portion of the maintenance repair and operation of the vessel is performed by midshipmen.

California Maritime Academy employs only eight nonlicensed crewmen on cruise. In short, without midshipmen the GOLDEN BEAR cannot get underway and stand out to sea. The midshipmen, under the eye of the faculty, run the entire ship. They navigate, stand bridge and engineering watches, and maintain and repair the ship. The faculty officer will step in only in *extremis*.

The strength of the schoolship system is that, upon graduation, the new third mate or third assistant engineer is fully qualified to do any job which he may be called upon to perform. If a midshipman is embarked as a cadet on an American flag merchant ship on a normal voyage, the quality of instruction he receives from the ship's officers will vary from ship to ship. Some ship's officers will take an interest in him. Some can't be bothered. In any case, the midship-

man cannot do jobs or perform maintenance which would take work away from an unlicensed member of the crew. To summarize, a midshipman embarked on a normal American flag merchant vessel can only be an observer. His training does not compare with the training received aboard a state academy schoolship.

Question 4. How many of your graduates have been permitted to join the MEBA since 1970?

Answer 4. As a rough estimate no more than 15 engineering graduates have joined MEBA in the past five years. None of our new graduates have joined in the past two years.

Question 5. How many MEBA school graduates would you estimate have been permitted to join the MEBA in this same time period?

Answer 5. All MEBA school graduates can enter the union on graduation as members of group three.

Question 6. How does this apparently discriminatory system work?

Answer 6. The union controls membership accessions by wording the eligibility rules to require a minimum number of days at sea on contract ships in the twelve-month period prior to applying. This qualifies only MEBA students, since they get a year's sea time as paid apprentice engineers. Getting six months of this time in their final school year makes them eligible for membership. Training ships are not contract ships, and the Federal Academy students thus are not technically crew members.

Question 7. How is the MEBA school financed and how are your schools financed?

Answer 7. The MEBA is financed by the shipping companies through assessments paid for each engineer in the crew as specified in their union contract. In essence it is a daily salary cost for each engineer employee that is paid to the MEBA for the school.

The California Maritime Academy is financed by the State of California, student tuition and fees, and the United States Government in that order. Actual operating expense amounts and percentages for FY 1975-76 are as follows:

	Amount	Percent
State of California	\$1,802,390	67
Student tuition and fees	517,413	20
U.S. Government	346,700	13

Question 8(a). Please comment on a law which states a certain percentage of ship's officers on subsidized American vessels must be reserve officers in the United States Navy.

Answer 8(a). Under the Merchant Marine Act of 1936, Section 302, para. G, all Deck and Engineering Officers on vessels receiving operating differential subsidies must be a member of the Naval Reserve, if eligible.

An officer is deemed to meet the requirement if he is a Naval Reservist or if he has a valid letter of rejection. A letter of rejection is given for two reasons: physical disqualification and unspecified disqualification (based on needs of the service). The basis for the latter disqualification can be varied—low aptitude, poor attitude, and nonrecommendation, or a result of adverse investigative information.

There should only be one reason for a letter of rejection—physical disqualification. Currently letters of rejection are easy to obtain. All a person has to do is to display an adverse attitude toward the Navy or the government, in general.

A check of the shipping industry would be required in order to determine how closely the industry is following the Naval Reserve requirement.

Question 8(b). Do your graduates receive reserve commissions?

Answer 8(b). All CMA graduates found qualified and acceptable to the United States Navy receive unrestricted line commissions in the Inactive Naval Reserve. In 1975, 68 percent of our graduates received commissions.

Question 8(c). Do those of the MEBA School?

Answer 8(c). No, however, MEBA graduates desiring to sail aboard subsidized ships must apply for a U.S. Naval Reserve Commission and be either accepted or receive a letter of rejection before they are employed aboard that subsidized ship. An industry survey would be required to determine how many MEBA graduates have U.S. Naval Reserve Commissions.

Question 8(d). Please estimate if possible how many jobs that should be held by reserve officers are being held by those unqualified to hold commissions in the reserve, but at the same time are members of a union controlling the manning of vessels subsidized by American citizens, many of whom, although more than qualified, are denied employment on these same vessels?

Answer 8(d). We have no accurate means for developing this data. Again, an industry survey, or existing data from the United States Maritime Administration, would be required to establish a valid figure.

Question 9. Please comment on the failure of industry management to rally behind you. If your graduates are as qualified as we have been led to believe, why don't the companies that hire such young officers stand up for the sources of future captains and chief engineers?

Answer 9. Of the total number of CMA graduates, approximately 15 percent are serving on active duty in the U.S. Armed Forces or Coast Guard; 35 percent are sea-going officers in the Merchant Marine, many of them captains and chief engineers; 20 percent are working tugboats, the fishing fleet, in rivers and harbors, and as pilots, or in maritime-related industries ashore; and a whopping 35 percent are in managerial positions within the maritime industry ashore after serving at sea for many years. These latter include the Vice President of States Steamship Company, the U.S. Fleet Manager of Chevron Shipping Company, many port captains, port engineers, marine managers, etc.

Therefore, to some extent these companies do stand up for the California Maritime Academy as a source of future captains and chief engineers, not only by hiring our graduates, but also by promoting them to the highest levels of management.

Over the period of the last three years 171 out of 172 graduates have passed their United States Coast Guard license examinations. Detailed data are provided in the following table.

DATA ON U.S. COAST GUARD LICENSE EXAMINATIONS

	Graduated	Licensed
Class of 1973:		
Deck.....	32	32
Engineer.....	28	28
Class of 1974:		
Deck.....	28	27
Engineer.....	26	25
Class of 1975:		
Deck.....	35	35
Engineer.....	23	23

1 engineer failed to pass the U.S. Coast Guard examination.

Employment data over the last four years are provided in the following table. A summarization of this data indicates that 230 graduates were employed as follows: 201 (87%) at sea in the maritime industry or the armed forces; 176 (77%) at sea; 18 (8%) in the armed forces; 27 (12%) in the maritime industry ashore; 7 (3%) in other industries one (0.4%) unemployed. (See page 79 for table.)

Mr. EMERY. Very briefly, Mr. Chairman, I would like to say I appreciate all of the witnesses coming from the various States to be with us today.

I am especially happy to see Admiral Rodgers down here from the great State of Maine.

Mr. DOWNING. Gentlemen, we thank you very much.

Can anyone tell me what the cost for supplying the fuel oil to these training ships would be?

Admiral RODGERS. It would be approximately \$1 million in the total, Mr. Chairman.

Mr. DOWNING. Gentlemen, the committee wants to thank you for your presentation and for coming the long distances to be here with us this morning. I think you have made an excellent case.

The subcommittee will adjourn to meet at the call of the Chair.

[Whereupon, at 12:06 p.m., the subcommittee adjourned, subject to the call of the Chair.]

MARITIME EDUCATION AND TRAINING

TUESDAY, DECEMBER 9, 1975

HOUSE OF REPRESENTATIVES,
COMMITTEE ON MERCHANT MARINE AND FISHERIES,
SUBCOMMITTEE ON MERCHANT MARINE,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:05 a.m., in room 1334 Longworth House Office Building, Hon. Thomas N. Downing (subcommittee chairman) presiding.

Mr. DOWNING. The subcommittee will please come to order.

Before we begin our hearings today I would like to acknowledge the presence of a very great man, in my opinion, a man who served as chairman of this committee, who served on the committee for years and years, and who made a tremendous contribution to the merchant marine of our country, and that is our former chairman, Edward A. Garmatz, who is seated in the back of the room.

Ed, would you please stand?

[Applause.]

Mr. DOWNING. Now, ladies and gentlemen, we are meeting this morning to continue hearings on a number of bills pertaining to maritime education and training, which I briefly explained on two previous occasions of hearings on this proposed legislation.

Our first witness this morning is Mr. William Horan, chairman, Committee on Merchant Marine of the American Legion.

STATEMENT OF WILLIAM HORAN, CHAIRMAN, COMMITTEE ON MERCHANT MARINE, THE AMERICAN LEGION, AS PRESENTED BY MICHAEL SLEE, DIRECTOR OF THE NATIONAL SECURITY FOREIGN RELATIONS DIVISION OF THE AMERICAN LEGION, ACCOMPANIED BY EDWARD LORD, NATIONAL LEGISLATIVE DIVISION

Mr. SLEE. Mr. Chairman, I am Michael Slee, director of the national security, Foreign Relations Division of the American Legion.

Mr. Horan is at this moment circling National Airport, and in the interest of the committee's time, I will just read his statement.

Mr. DOWNING. Please identify your colleague.

Mr. SLEE. I am accompanied by Ed Lord of our National Legislative Division.

Mr. Chairman and members of the subcommittee, I appreciate the opportunity to present our views on H.R. 1626, H.R. 9864, H.R. 10413, and related legislation pertaining to officers for the U.S. merchant marine.

(97)

You might very reasonably ask what interest has the American Legion, a veterans organization, in the well-being of the American merchant marine and an adequate merchant officers corps.

I can tell you that our concern and continuing involvement with this "fourth arm of national defense" goes back to the experience of the founders of our organization in World War I. These young Americans, members of the AEF, never forgot how dependent our Nation was on the maritime fleets of our allies nor what it cost our Nation to hastily begin building one in the midst of a war.

Since the earliest days of its existence, the American Legion has been fully cognizant of the vital relationship between merchant shipping and national security.

Our specific comment upon the legislation under this subcommittee's consideration is based upon Resolution No. 432 which was unanimously adopted at our 57th National Convention earlier this year. This position supports legislation to increase annual subsistence allowance from the Maritime Administration to the students of the State maritime academies to \$1,200 from its present level of \$600.

It is our view that the annual cost, slightly over \$1 million, is far outweighed by the continued support to assure the Nation of an adequate supply of merchant marine officers. I have appended a full copy of this resolution to my statement and ask that it also be made a part of the record of these hearings.

[The resolution referred to follows:]

57TH NATIONAL CONVENTION OF THE AMERICAN LEGION, MINNEAPOLIS, MINN.,
AUGUST 19-21, 1975

RESOLUTION NO. 132

Committee: National Security.

Subject: Increase subsistence allowance to students of the State Maritime Academies.

Whereas, the six State Maritime Academies train more than two-thirds of the nation's merchant marine officers; and

Whereas, these schools receive less than one-third total federal support; and

Whereas, these graduates constitute the largest body of trained merchant marine officers in our nation; and

Whereas, today's high technical vessels require the skills of individuals of superior ability, it is imperative to attract sufficiently qualified students into our nation's maritime colleges; and

Whereas, the Maritime Administrative subsidy of \$600 per cadet has never been increased since the existing law was enacted back in 1959, in these inflationary times this is obviously inadequate; now, therefore, be it

Resolved by The American Legion in National Convention assembled in Minneapolis, Minnesota, August 19-21, 1975, that the annual subsistence allowance from the Maritime Administration to the students of the state maritime academies and colleges be increased from \$600 to \$1200.

MR. SLEE. As the subcommittee is aware, the \$600 level of subsidy has not been increased since that Federal level of support was established in 1958. The all too obvious impact of inflation over this 17-year period makes this increase quite reasonable.

Just as a matter of contrast, subsistence for ROTC cadets enrolled in the precommissioning program has increased from \$270 to \$900 during this same period. Additionally, the regimented routine at the academies and the requirement to go to sea in training ships between academic years precludes any meaningful employment for the cadets during the school year or the summer vacation period.

While I am not one who sees additional Federal support as a panacea for the many woes of our national education system, I know Mr. Horan is close to several of the State maritime academies and know that this increased subsistence will maintain the high caliber of education which our merchant marine officers now receive.

I appreciate this opportunity to appear before you this morning and respectfully urge your favorable consideration of this increase.

Mr. DOWNING. Thank you very much for a brief, but a very important statement.

Mr. SLEG. Thank you very much.

Mr. DOWNING. Thank you.

Our next witness this morning is Mr. John G. Ingram of the National Council of the Maritime Academy Alumni Association.

STATEMENT OF JOHN G. INGRAM, NATIONAL COUNCIL, MARITIME ACADEMY ALUMNI ASSOCIATIONS

Mr. INGRAM. Thank you, Mr. Chairman and Mr. Biaggi.

My name is John G. Ingram, and it is my personal pleasure and honor to address this body on behalf of the National Council of Maritime Academy Alumni Associations.

The Council is comprised of representatives of the alumni associations of California Maritime Academy, Maine Maritime Academy, Massachusetts Maritime Academy, State University of New York Maritime College, Pennsylvania Maritime Academy, Texas Maritime Academy, and the U.S. Merchant Marine Academy. The Council welcomes this opportunity to appear before you and present its recommendations on H.R. 10413.

We are well aware that several speakers have presented various views to you on the bill, and in the interest of time we wish to state that we support the views of Milton Nottingham, Jr., the representative of the alumni association of the U.S. Merchant Marine Academy.

In addition, we endorse the views of the superintendents of the State maritime academies which were presented by Admiral Kinney on December 3, 1975.

However, the Council believes that there is a strong and pressing need for it to be heard on the subject of maritime training which is of vital interest to all the member academies alumni associations and the Nation itself. The merchant marine is sometimes referred to as the fourth arm of defense, and indeed, it has been, as each of you are well aware.

At the outset of every major conflict this Nation has been involved in, our U.S. merchant marine has been sorely depleted both in ships and trained personnel. We do need a strong U.S. merchant marine in peacetime and in time of national emergency. Our merchant marine must be adequately manned, equipped and trained.

It is indeed fortuitous and most commendable of this committee to have appointed the ad hoc Committee on Maritime Education and Training, chaired by Congressman Fred Rooney. The report was most thorough concerning the Federal and State maritime academies and has given a vital insight into the training of our future merchant marine officers from those academies.

Members of our associations are right this moment manning our merchant ships and holding down prominent positions in the maritime industry. Besides the captains, chief engineers, pilots, mates, and assistant engineers on all types of vessels, our members may be found shore-side in the marine engineering field, stevedoring, steamship companies, marine insurance, ship chartering and brokering concerns, marine carpentry concerns, admiralty law firms, oil companies, survey companies, offshore drilling companies, towing companies, salvage concerns, and I could go on and on.

Some of our graduates have elected Government service, and may be found in all branches of the Armed Forces; some have gone into NOAA, others into various State and Federal law enforcement agencies, Atomic Energy Commission, and so on. Many of our members have become teachers of maritime trades in the various academies and union schools.

In addition, upon graduation, the majority of our members are commissioned as officers in the U.S. Naval Reserve and many have elected to continue their reserve affiliation after completing the mandatory requirements. These dedicated reservists may well be the initial manpower source of licensed merchant marine officer personnel to be called upon in time of national emergency.

The education and training received at the various academies is invaluable to the maritime industry and to the Nation as a whole. The academies do not merely train ships' officers, but future leaders of the industry itself.

I would like to address myself to section 2 of the bill where it speaks of "schools other than the U.S. Merchant Marine Academy and the State maritime academies" fulfilling short-term emergency requirements for officers of the U.S. merchant marine.

The Rooney report reiterated the MARAD study conclusion that short-term emergency needs of U.S.-flag merchant fleet for licensed officers can best be met by "industry schools"—notably during wartime, and stated "industry schools have a particular well-suited capability to perform this function."

Nowhere in either the MARAD study or the Rooney report are any facts presented to bolster this unsupported conclusion. Historically, the Federal and State academies have always answered the Nation's call to accelerate programs and graduate licensed officers.

As a matter of fact, during the recent Vietnam conflict, the State academies and Federal academy supplied the greater portion of licensed officers. Table 3 of the Rooney report indicates that the 1974 enrollment capacity of the Federal and State academies was 4,875 as compared to the "industry" schools; namely, the MEBA school which had a capacity of 500.

It stands to reason that the Federal and State academies because of their potential enrollment capacities and facilities could more easily fill emergency needs for both deck and engineering officers of the U.S. merchant marine.

Furthermore, currently there is no major union schools to train third mates. The physical plants of the various academies could be greatly expanded to meet national emergencies. In addition, the source of apprentices and unlicensed personnel with the requisite sea time and academic skills who would enter union schools has been greatly depleted by the slump in shipping and the all-volunteer Armed Forces.

We therefore recommend that all after the word "function" in section 2, line 6, be stricken.

We disagree with section 3 insofar as it concerns itself with projecting enrollments and estimates of the Federal and State academies based on the needs of the U.S. merchant marine during 4-fiscal-year periods. While this provision appears to limit the number of persons appointed to the Federal academy during any year, it does not, in our opinion, limit the enrollment in any State academy.

However, the subcommittee chairman has stated—Newsday, October 31, 1975—that the purpose was to contain enrollments at Kings Point and the six State schools "so they do not expand beyond levels that are unwarranted."

We contend that such provision is not only illegal, insofar as it pertains to the State academies, but a violation of State's rights in its attempt to control State educational systems. As far as the Federal academy, we recommended that enrollment not be reduced below the present level.

Moreover, because of the cyclical fluctuations in supply and demand in the merchant marine, it is virtually impossible to forecast the needs of licensed officers 4 years in advance. To restrict enrollments on such forecasts would be dangerous.

As this committee is aware, there is talk going on about the grain shipments to Russia.

If the American fleet gets that grain it will have to activate about 50 ships with an average of probably 12 officers per ship, and finding unlicensed personnel on the average of approximately 35 per ship.

Four years ago, or even possibly 1 year ago, I doubt anyone could have told Congress that this deal was going through, and we would have this need for officers.

This grain shipment will clear out the union halls of the Seafarers International Union and the MEBA.

We believe that section 4(a) may be superfluous in that it is our impression that the State academies' training vessels are manned in accordance with standards prescribed by the Commandant of the Coast Guard.

The Rooney report—p. 346—states the reason for this provision is to protect the Government investment in the training vessels on loan to each State academy and the interest of the safety of the students who use these vessels.

We understand that the vessels are inspected by the Coast Guard and manned by officers licensed by the Coast Guard. The students are under the supervision of those licensed officers, and their safety is one of the prime concerns of those in charge.

We wholeheartedly support section 4(b), increasing the cadet subsistence allowance from \$600 to \$1,200 per year. This increase is long overdue, and would be commensurate to the allowances provided to all ROTC students. For this increase we are most grateful to the committee.

However, the \$600 subsidy was set in 1958, and while \$1,200 may be equitable and fair for 1975, what about 1976, 1977, 1978, and so on?

Will \$1,200 be sufficient in 1977 and 1978? We therefore recommend that a cost-of-living adjustment be tacked on to the \$1,200 allowance to offset inflation.

We disagree with section 4(c) which provides that if the amount of funds authorized and appropriated by Congress is insufficient to provide \$1,200 allowance to all cadets, then funds be apportioned in direct proportion to the 1975 enrollment of each State academy.

We feel this is false giving. Congress and the State academies tell the cadets that there is a \$1,200 Federal cadet subsistence allowance, but it may in fact be a lot less depending on the enrollment and attrition in the schools and the amount of money apportioned by Congress. We feel the section should be eliminated.

We concur with the intent of section 6 of the bill, and believe it would be beneficial for the Coast Guard to compile data on licensed merchant marine officer personnel who have not attained the age of 65.

However, we do not support the idea of the Coast Guard compiling data on persons who have let their licenses expire. We do not believe it would be at all beneficial to accumulate data on such personnel, and we feel that it would be an undue hardship and create administrative headaches for the Coast Guard to have to do so.

We strongly recommend enactment of section 5 and section 7. At the time of upgrading and renewal of the licenses we suggest the Coast Guard be required to conduct a local agency check with Federal and local law enforcement agencies concerning possible criminal convictions of licensed officer personnel, which may affect their ability to sail.

We call attention to the resolution of the Council adopted November 1, 1975, and forwarded to the subcommittee:

The national Council Maritime Academy Alumni Associations is an organization consisting of the active members of the Alumni Associations of the Maritime Academies or colleges of the States of Maine, Massachusetts, New York, Pennsylvania, Texas and California and the United States Merchant Marine Academy at Kings Point, New York. The objectives of the Council are to promote and strengthen the American merchant marine.

Whereas, the present membership requirements of two of the principal maritime officers unions effectively preclude the newly licensed officers graduated from the Federal and State Maritime Academies from joining those unions, and

Whereas, these merchant marine officers are therefore generally unable to obtain employment as licensed officers on oceangoing ships; now therefore be it

Resolved, That the National Council Maritime Academy Alumni Associations calls upon the members of the House Committee on Merchant Marine and Fisheries, the Secretary of Commerce, the Assistant Secretary of Commerce for Maritime Affairs, and the Maritime Administration to use their good offices to prevail upon the International Organization of Masters, Mates and Pilots and the Marine Engineers Beneficial Association to relax their rules for union membership, thus permitting the present and future graduates of Federal and State Maritime Academies to qualify for membership and for employment as licensed deck and engineer officers on the ships under contract to these two unions (IOMM&P and MEBA), and be it further

Resolved, That a copy of this Resolution be forwarded to the above named.

In closing, I would like to speak to job discrimination carried out by the major licensed officers unions: namely, the International Organization of Masters, Mates, and Pilots and the Marine Engineers Beneficial Association, district 1. Graduates of our academies and members of our alumni associations have been denied membership in the unions and thereby denied deep sea berths aboard the majority of our oceangoing U.S. merchant ships.

We believe that this situation should not be tolerated by the Congress. We suggest that the provisions of the Merchant Marine Act of 1936 which provides that officers on ships whose owners receive operating differential subsidy should, if eligible, be Naval Reserve officers, be enforced.

The giving of waivers to licensed officers when there are over 800 newly licensed officers graduated every year, the majority of whom hold commissions but cannot ship out because of the unions is surely not the intent of the act of 1936.

This concludes my statement and I will be pleased to attempt to answer any questions that the subcommittee may have.

Thank you.

I would also request the right to submit in writing any rebuttal the further testimony that is going to be given here this morning.

Mr. DOWNING. Without objection, you will be permitted to supplement your present testimony.

I would like to turn now to Mr. Biaggi who, I might add, is the man solely responsible for this effort to increase the subsistence from \$600 to \$1,200. He has been persistent, and I mean he probably will prevail.

Mr. Biaggi is recognized.

Mr. Biaggi. Thank you very much, Mr. Chairman.

Thank you, Mr. Ingram, for your statement and for your consistent support in this effort since we initiated it some years ago.

I have two questions in mind.

I think in your testimony you stated that you would oppose any limitations of—that is class limitations in the various State academies.

Mr. INGRAM. That is correct, Mr. Biaggi.

Mr. Biaggi. Let us have a little colloquy in connection with that issue.

What you are saying is that the academies should be able to provide for as many students as apply?

Mr. INGRAM. I do not believe that is the position of the Council, Mr. Biaggi.

The Council feels that the various academies have people that oversee them that would not allow them to take in 2,000 people in any one year.

Most academies are part of various State universities, and they have trustees appointed by the Governor of the State or the regents of the various State university systems who would oversee the fluctuations.

As we all know, in the merchant marine today, we leave it to those who are best advised to curtail the enrollment and not this committee, we feel.

Mr. Biaggi. Has the enrollment been curtailed, as a matter of fact?

Mr. INGRAM. Not yet, no.

Mr. Biaggi. So that the enrollment has been logically consistent despite the fact we have ups and downs in the employment in the merchant marine today?

Mr. INGRAM. That is correct, sir.

Mr. Biaggi. So what you are saying is you are opposing limitations, that is statutory limitations or perhaps funding limitations but we have, in fact, administrative limitations.

Mr. INGRAM. Yes, sir.

But getting back to the provisions of section 2, wherein it states that in time of national emergencies that the industry schools would be the ones to be the primary source of augmentation.

We feel that section 2 and the other section dealing with the number, possibly the schools would suffer greatly in the future. I do not know if that is really the intent of the legislation, and from reading some

of the transcripts of testimony of previous witnesses, I don't believe it is.

Mr. Biaggi. When I was talking about limitations, I was thinking in terms of peacetime operations. If we come to a point of national emergency, as Admiral Kinney testified, there is a standby program. As he and the other admirals of the various State academies stated, the schools do have the capacity to make the transition and provide the same rapid output as the industrial schools by shortening the period of learning.

I must say I see no objection to that. You are talking about limitation in that area, and perhaps you and I agree. But if you talk about opposing limitation on the regular ordinary duty basis, then we part.

Mr. Ingram. No, sir, for example we feel that if in the year 1977 the limitation is 200 cadets per school, and in 1978 there is a conflict, a national emergency where the schools would have to be blown out to 500 cadets per school, that the limitation of the class of 1977 would affect us, because we cannot always predict when we are going to have a national emergency or even oil from Alaska or grain to Russia or India.

There are various fluctuations, both in peacetime and in national emergencies that affect this industry.

Mr. Biaggi. What you are really saying is on the basis of a national emergency, we should have the schools geared year after year and develop their curve every 10 or 20 years?

Mr. Ingram. Not only the national emergency but for the commercial necessity of ever-increasing shipping.

Mr. Biaggi. What has been the job experience of the graduates of the different schools?

Mr. Ingram. I notice from the testimony of Captain Nottingham, he was going to attempt to gather the job experience from the various State academies, and it was going to be the council's job to deliver it to this committee.

However, I understand that last Thursday, Admiral Kinney took it upon himself to gather the information. I have been in contact with the admiral's office, Mr. Biaggi, and I understand that is to be delivered to the committee by Admiral Kinney.

Recently, we know, of course, our graduates cannot go to sea on the majority of U.S. oceangoing tonnage because of discrimination by the unions. Many have gone elsewhere—offshore drilling, NOAA, Army Corps of Engineers, et cetera.

Mr. Biaggi. Admiral Rizza testified on the west coast the graduates of his academy have no difficulty finding billets on ships.

Mr. Ingram. Well, I know on the west coast there is quite a bit of tuna fishing operation where they require oceangoing licenses on the vessels.

Some of the U.S. unions, the masters, mates, and pilots have an applicant system that the licensed officer can apply for membership. He cannot get membership until the rolls reach a certain level, and if none of the members of the union want that job, an applicant can fill that job.

Mr. Biaggi. You sustain the allegations made by previous witnesses that in obtaining billets there is discrimination by the various unions or a single union and members of unions?

Mr. Ingram. Yes; we do.

Mr. BLAGGI. That is all, Mr. Ingram.

I want to thank you for the support of the section to increase the subsistence for the students. I think it is really overdue and it is unreasonable to deny this to them.

I have not yet been convinced by any arguments to the contrary. Thank you again.

Mr. INGRAM. If I may add just one more aside on this.

I started at the State university New York Maritime College in 1960. At that time, the State university system of New York was free tuition. It was not until 1962 that tuition was started in the State universities.

I might add that room and board in 1960 was \$600 for the entire year. The tuition was free. We received the \$600 subsidy from Congress so it was absolutely no cost except for uniforms, books and living expenses, but tuition, room and board was covered by the \$600.

Mr. BLAGGI. As long as you started on that line, what does it cost the student now?

Mr. INGRAM. I understand it varies. The cadets here from the Maine school said it is approximately \$4,000 for a cadet in Marine, and I think \$3,500 at Massachusetts, and \$2,900 at Schuyler. And I do not have the figures on Texas, sir, but I believe they are in the Rooney report.

Mr. BLAGGI. Those numbers that you have just stated; is that per annum?

Mr. INGRAM. That is per annum.

Mr. BLAGGI. From your experience, if you know, what level of the economic strata do these students come from?

Mr. INGRAM. I know when I was there—it goes back some time, but it is middle class and lower middle class. Thank you.

Mr. DOWNING. Mr. Sarbanes.

Mr. SARBANES. Mr. Ingram, what do you understand to be the rationale for the Federal subsistence allowance to students of these various maritime academies?

Mr. INGRAM. To assist the cadets personally in obtaining an education, which is vital to the Nation, namely training them to be officers on our merchant ships which, in time of peace, are vital to the economy and, in time of war, are vital to the national defense.

Mr. SARBANES. I take it from the answer that where the students end up and what they end up doing is essential to the rationale for the subsistence.

The subsistence is not simply to help the students because that rationale would justify subsistence to all students at all educational institutions, would it not?

Mr. INGRAM. That is right, sir.

Mr. SARBANES. Well, now, let me pursue that a little bit. I am a little concerned because there are no specific figures in your statement bearing on this matter. I am reading now from your statement, which says:

In addition, upon graduation the majority of our members are commissioned as officers in the United States Naval Reserve and many have elected to continue their reserve affiliation after completing the mandatory requirements.

Do you have any figures on how many?

Mr. INGRAM. No, sir, but I will attempt to answer that later on.

Mr. SARBANES. That would be helpful, Mr. Chairman.

Mr. DOWNING. Will you supply that for the record, Mr. Ingram?

Mr. INGRAM. Yes, sir.

[The information was not received by the time this hearing went to press.]

Mr. SARBANES. Then, in the same paragraph, at the end, you say:

The academies do not train ship's officers but future leaders of the industry itself.

Now, do you see training leaders of the industry as a rationale for the subsistence allowance as opposed to training ship's officers?

Mr. INGRAM. Well, I do not think we can be so clear on it. Leaders of the industry include ship's officers.

Mr. SARBANES. I understand that, and I am not for the moment disputing the ship's officers' position.

I want to go to the balance of it. Let me refer you back to page 2 of your statement, at the bottom thereof. You say:

Our members may be found shoreside, in the marine engineering fields, stevedoring, steamship companies, marine insurance, ship chartering and brokerage concerns, marine carpentry concerns, admiralty law firms, oil companies, survey companies, offshore drilling companies, towing companies, salvage concerns, and I could go on and on.

Would you argue that any of those occupations set out there constitute an appropriate rationale for a Federal subsistence allowance to students?

Mr. INGRAM. Sir, in time of national emergency, people in stevedoring concerns vitally help. They assist to load and unload vessels. Without these people, ships could not be loaded in time of national emergency.

The same goes for marine engineering. Graduates of our various schools are in research and development with General Electric and General Dynamics. They are building ships, not only for the merchant marine but for the Navy also.

Mr. SARBANES. Well, do you encompass those activities at the bottom of page 2 as being within the merchant marine?

Is that your definition of the merchant marine?

Mr. INGRAM. No, sir.

Mr. SARBANES. All right.

There is a transition in your statement I want to note. At the end of the first paragraph on page 2, where you talk about the need for this maritime training, you say:

Our merchant marine must be adequately manned, equipped and trained.

Let us assume one accepts that assertion. At the bottom of page 2, it is all of a sudden expanded to include a whole host of activities. I, for the life of me, do not see why someone who makes an enormous salary in an admiralty law firm can provide you any justification for a subsistence allowance.

Mr. INGRAM. Well, the individuals who go into shoreside occupations in the maritime industry, for the most part, have served in the merchant marine or the Navy or the Naval Reserve, and have given their time.

Mr. SARBANES. It would be helpful if you could give me some statistics that would support that assertion.

Mr. INGRAM. I am saying, until recently, our graduates, before there was discrimination by the unions keeping them from going to sea in the oceangoing fleet of the United States, did go to sea.

Mr. SARBANES. Well, you do not argue that the subsistence is justified in order to man these occupations, do you?

Mr. INGRAM. No, sir.

Mr. SARBANES. So we are back, really, to the merchant marine itself. That is your basic argument.

Mr. INGRAM. That is correct.

Mr. SARBANES. Let me ask you this question.

If that is the case, does it become pertinent as to what enrollments in the schools should be, at least to the extent that there is a Federal subsidy involved, in terms of the job opportunities available in the merchant marine?

Does that become a pertinent consideration?

Mr. INGRAM. Yes, sir.

Mr. SARBANES. Well, in that regard, I am a little hard put to understand your assertion then at the top of page 5 of your statement.

You say:

The subcommittee chairman has stated that the purpose was to contain enrollment at the Kings Point and six State schools so they do not expand beyond levels unwarranted. We contend such provision is not only illegal but a violation of the State's rights.

The State can run any kind of State educational system it wants. Our concern is the providing of Federal moneys as a subsistence allowance. So I really do not understand this assertion.

Would you favor a situation—let us take a hypothetical—in which the schools were producing each year, through their enrollments and helped by Federal subsidies, four times the number of graduates that there were jobs for them to hold?

Mr. INGRAM. Well, sir, to get back to the point I made before, or attempted to make before, that the fluctuations in shipping in the merchant marine make it very difficult for anyone to predict with reasonable certainty the need for merchant marine officer personnel in the normal situation.

Mr. SARBANES. I concede that point to you. But, at some point along the spectrum, how many jobs are there aboard ships today; do you know?

I am told it is somewhere in the range of 6,000 to 7,000. Is that correct?

Mr. INGRAM. That would be my estimate.

Mr. SARBANES. Presently?

Mr. INGRAM. Yes, sir.

Mr. SARBANES. How many students are enrolled at these merchant marine academies presently?

Mr. INGRAM. Approximately 3,000, I believe.

Mr. SARBANES. Well, that is an interesting situation in terms of a subsidy being provided for training.

Does it concern you that we seem to be training far many more people than there are positions for them to hold?

Mr. INGRAM. Well, sir, I believe the figure you talked about concerning the 12,000, that is just on the ocean going fleet.

I do not believe those figures relate to the offshore drilling, the various Government agencies, NOAA, Army Corps of Engineers, the tuna boats, et cetera.

I believe we are talking about approximately 500 oceangoing ships with an average complement of 12 officers.

Mr. SARBANES. Now, you are shifting the rationale for the subsistence. I never understood it was to provide people for the Corps of Engineers or NOAA. Maybe it is, but if that is the case, you ought to assert that as a rationale.

Mr. INGRAM. NOAA and the Corps of Engineers require officers licensed by the U.S. Coast Guard, namely merchant marine officers, mates and engineers to man their vessels.

Mr. SARBANES. On that point I am not quite sure why you oppose so strenuously figures on the number of persons who have let their licenses expire. You do that at the top of page 7 of your statement in rather strong terms. And it is not quite clear to me why you do that.

Mr. INGRAM. The council takes the position that those people who have let their licenses expire have not shown an interest in their license or in the merchant marine and, therefore, would not be personnel that the Government could call or would ask to come back to the merchant marine.

They have already shown their lack of interest in their license, and to make the Coast Guard compile records on those people, I think, would be just an administrative headache.

Mr. SARBANES. Do you have any figures on how many of your people who were practicing law in admiralty law firms and all these other things at the bottom of page 2 of your statement left those occupations at the time of the Vietnam sealift in order to resume their jobs as officers aboard ships?

Mr. INGRAM. No; I do not, sir.

Mr. SARBANES. Would you be able to get some of those?

How many people belong to the alumni association, that is the National Council of the Maritime Academy Alumni Associations?

How many people belong to the alumni?

Mr. INGRAM. Of the various schools, I do not know.

I believe Kings Point is about 8,000.

I think the Alumni Association, State University of New York Maritime College is about 1,500.

Mr. SARBANES. Would those Associations be able to compile and submit to this committee some figures that indicated the number of their people?

You say we have to have them in the standby reserve, and perhaps we do. I am not certain. But it would be helpful to know, if that is the argument being made, how many left these various kinds of jobs you talk about here in order to meet the national need at that time.

Mr. INGRAM. Sir, the ones, I think, who would be the manpower source to be called up in time of national emergency to man naval auxiliaries and would be Naval Reserve officers who hold merchant marine licenses.

Those personnel, up to the age of 65, who hold licenses or who have let their licenses expire, I do not know how the Government could call those people back if they have fulfilled their mandatory military requirement some place.

Mr. SARBANES. I am not suggesting that if they fulfilled their requirement, they can be compelled to return.

My inquiry was how many of them volunteered to return?

After all, they received a subsidized education. Not everyone gets a subsidized education.

Mr. DOWNING. Would the gentleman yield?

Mr. SARBANES. Yes.

Mr. DOWNING. I think what Mr. Sarbanes is getting at is during the period of the Vietnam war, how many merchant marine alumni left their occupations, whatever it was, to go back into the merchant marine service.

Is that not what the gentleman is inquiring about?

Mr. SARBANES. That is right.

Mr. INGRAM. I will attempt to get the information from the Alumni Associations.

Mr. SARBANES. Thank you, Mr. Chairman.

Mr. DOWNING. Mr. McCloskey.

Mr. McCLOSKEY. What does the All Volunteer Army have to do with the ability of the schools to obtain students?

Mr. INGRAM. Sir, prior to the all-volunteer concept, many people enlisted in the Navy and Coast Guard as a way of possibly not serving in the Army.

Many former Coast Guard and Navy quartermasters, coxswains, after fulfilling their mandatory requirement with the Navy or the Coast Guard came into union schools and sat for original licenses. A quartermaster, say, on an aircraft carrier, who had 4 or 6 years as quartermaster, could come in and sit for original second mate's license, and he was a good savvy mate.

Now, with the lack of the mandatory draft, and the increased benefits in the Armed Forces, more people are staying apparently and are just not leaving to go into the merchant marine.

Mr. McCLOSKEY. We have a comparable situation with medical students in training and people who go to the service academies.

The service academy graduates are required to spend 5 years in after graduation. Would it be appropriate to require an individual, if we pay the subsistence allowance, to take a job as an officer in the merchant marine or one of these related capacities that you are seeking as a Federal goal to achieve?

Mr. INGRAM. I understand there are requirements of the graduates of all schools to perform some mandatory service, whether within the merchant marine or various reserve programs with the Navy, 30 days for 6 years or 90 days a year for 3 years.

There are various requirements already on the cadets.

Mr. McCLOSKEY. Are you satisfied that those are adequate?

Mr. INGRAM. Well, I think it gets back to the discrimination by the unions.

Many of the graduates cannot ship out in the merchant marine who would ship out.

Mr. McCLOSKEY. Do you think then this committee should take steps to end discrimination by the unions?

Mr. INGRAM. Yes, sir.

Mr. McCLOSKEY. In what way? How would you suggest we do it?

Mr. INGRAM. I understand there was a lawsuit brought by applicants to the Marine Engineering Beneficial Association, actual charges filed with the National Labor Relations Board out in California. And the NLRB indicated it did not have jurisdiction of the dispute because

the MEBA was not a union in that it was composed of supervisory personnel.

Possibly some legislation should be enacted to cover the situation. They are an association but not a union. But they carry on like a union.

Mr. McCloskey. Thank you, Mr. Chairman.

No further questions.

Mr. Downing. Mr. Emery.

Mr. Emery. No questions, Mr. Chairman.

Mr. Downing. Mr. Ingram, I would like to clarify for the record that the intention of the report of the Ad Hoc Committee on Maritime Education and Training is not to preclude Federal and State academies from responding to a national emergency.

This report merely gives recognition to the greater surge capability of the MEBA school in Baltimore because of its shorter program, all of which is directed toward ship operations.

I also would like to clarify for the record the legislation we are considering today makes no attempt to control State educational systems. It does attempt to set ceilings on the levels of Federal support for these institutions.

I would like to thank you for your presence today and for your testimony.

Mr. Ingram. Thank you, Mr. Chairman.

Mr. Downing. The next witness is Mr. John H. Leeper, Project Manager, Marine Transportation Research Board, National Academy of Sciences.

Mr. Leeper, I notice you have a fairly comprehensive statement.

Would you care to summarize it and then we will, without objection, include it in the record as though delivered?

STATEMENT OF JOHN H. LEEPER, SENIOR PROJECT MANAGER, MARITIME TRANSPORTATION RESEARCH BOARD OF THE NATIONAL RESEARCH COUNCIL/NATIONAL ACADEMY OF SCIENCES

Mr. Leeper. Yes, Mr. Chairman.

I think I can get through my statement in 12 minutes. With your permission, I will read it.

Mr. Downing. You may proceed.

Mr. Leeper. Mr. Chairman, gentlemen. I am honored at this opportunity to appear before you to make this presentation on the subject of training and licensing of the U.S. merchant marine officers. In particular, my comments will apply to section 7 of H.R. 10413.

My testimony is based on experience and knowledge gained in more than 8 years as a project manager with the Maritime Transportation Research Board of the National Research Council/National Academy of Sciences.

During that time, I have completed eight major maritime studies, three of which have been concerned directly with the problems of merchant marine safety. Prior to joining the staff of the National Research Council, I was a water transportation analyst with the Defense Intelligence Agency having come to that position from 2 years at sea as a naval line officer.

The National Academy of Sciences is a private honorary organization of over 900 scientists and engineers elected on the basis of out-

standing contributions to knowledge. It was established by Act of Congress signed by Abraham Lincoln on March 3, 1863, and is supported by private and public funds. Under the terms of its congressional charter, the Academy is called upon to act as an official and independent adviser of the Federal Government in all matters of science and technology.

The National Research Council was organized as an agency of the National Academy of Sciences in 1916 at the request of President Wilson to enable the broad community of U.S. scientists and engineers to associate their efforts with the limited membership of the Academy of Sciences in service to science and the Nation.

The Maritime Transportation Research Board, a unit of the National Research Council, has been in existence for approximately 20 years. The individuals that serve on the Board's several study panels are selected for their knowledge and competence in the affairs under consideration. These individuals serve in the national interest on a voluntary basis and without pay.

I should like to emphasize at this point that any opinions that I may express during this testimony will be mine, and are not necessarily those of the National Academy of Sciences and/or its affiliated organizations.

As a matter for the record, I have submitted my resignation to the National Academy of Sciences effective the end of this week on Friday, December 12, at which time I will assume responsibilities as vice president of the transportation consulting firm of Simat, Helliesen, and Eichner here in Washington, D.C.

The first merchant marine safety study effort undertaken by the Maritime Transportation Research Board entitled "A Study of the U.S. Merchant Marine Safety Regulatory System" was completed in 1970. The second was a study entitled "Merchant Marine Casualty Data" which was completed in July of 1973. The latest effort has been completed by its study panel and is currently being reviewed within the National Academy of Sciences for publication early next year.

This study, entitled "Human Error in Merchant Marine Safety," is of direct interest to this subcommittee. Although the study has not been released for publication, I will present my opinions on its findings, including the implications they have for the training and licensing of U.S. merchant marine officers.

To bring this study into proper perspective, I think it is necessary to deal briefly with the problem.

A Washington Post article on August 2, 1972, proclaimed that ships of the world's merchant marine were sinking at the rate of a ship a day. This is in fact an accurate statistic according to Lloyd's Register of Shipping statistical tables.

In 1973, the Register reported that some 363 vessels of 100 gross tons and over were completely lost through casualties.

The United States has contributed to this world problem as confirmed by both Lloyd's and the U.S. Coast Guard statistics. In 1973, Lloyd's Register of Shipping reports that 21 of the 363 vessels reported lost were of U.S.-flag. U.S. Coast Guard statistics for that period are not directly comparable since theirs are maintained on a fiscal year basis.

However, U.S. Coast Guard statistics for fiscal year 1973 show that 19 U.S.-flag vessels in the inspected category were lost to casualties. For fiscal year 1974, the Coast Guard reported the loss of 54 U.S.-flag vessels.

In addition, in fiscal year 1974, the U.S. Coast Guard reported 199 deaths and 3,388 merchant marine casualties involving 5,413 vessels under its jurisdiction. Since 1972, the U.S. Coast Guard has recorded a 31-percent increase in the number of vessels involved in merchant marine casualties.

The current cost of merchant marine casualties, excluding human lives lost, has been estimated to exceed \$300 million per year for the U.S. oceangoing merchant marine alone. Additionally, it has been estimated that the loss of a VLCC off the U.S. coast could cost in the order of \$100 million in terms of the value of the hull and cargo alone. This excludes environmental damage which is almost impossible to estimate.

These costs, however, are insignificant when compared to the potential destruction that a merchant marine casualty can cause. A classic example of this potential can be related in the collision of the merchant ships *Imo* and *Mont Blanc* in Halifax Harbor in December 1917. These 2 vessels exploded and eventually claimed the lives of 1,600 people, completely devastating the city of Halifax. By comparison, the San Francisco earthquake claimed only 452 lives.

Although the Halifax Harbor incident was many years ago, I am aware of at least one near miss involving an ammunition ship in San Francisco Harbor during the Vietnam era. As increased numbers of LNG and VLCC vessels enter our harbors, the possibilities of such catastrophies will become less and less remote.

The prospects for safe merchant marine operations in the future are not promising. Trend line projections show that 75,000 merchant vessels totaling over 400 million gross tons may be plying the world's trade routes by 1980.

If current tonnage loss ratios are maintained, some 1,400,000 gross tons of shipping may be lost by 1980. Perhaps even more disturbing is the fact that vessels involved in hazardous cargo carriage, tankers, chemical carriers, liquefied natural gas carriers, et cetera, represent the fastest growing segment of the world's merchant marine.

At the same time, some of the merchant fleet that are growing the most rapidly are those with the least regulation and the poorest safety performance. For instance, Liberia, with the world's largest and fastest growing merchant fleet, lost 281,391 gross tons in 1973, representing .56 percent of its active tonnage. This was the poorest performance of the major maritime nations.

Contrary to popular opinion, the United States is not a leader in safe operation of its merchant vessels. The National Academy of Sciences' merchant marine safety study published in 1970 found that the United States ranked eighth in safety performance. The study went on to compare the U.S. vessel loss record with that of Great Britain. For vessels of 1,000 gross tons and over, it was determined that the United Kingdom had a lower level of vessel losses over a 7-year period, and that there was an 88.5 percent level of confidence that this difference could not have happened by chance.

In other words, the study showed that we were 88 percent sure that this casualty differential was caused by some real differences in either the way we build or operate our merchant vessels. Although no new

studies of this type have been done since 1970, a cursory inspection of Lloyd's statistical tables show that this pattern has not changed significantly, and as a result of this level of confidence has probably risen.

Lloyd's tables show that in 1973 the United States lost .21 percent of its active tonnage to merchant marine casualties, thereby registering a poorer safety performance than France, Germany, Japan, the Netherlands, Norway, Poland, U.S.S.R. Sweden, and Great Britain. It was exceeded in its loss ratio by Liberia Greece, Italy, Portugal, and Spain.

Merchant marine casualties can result from a number of factors, including a series of combination of events and circumstances. In most cases, human error or personnel fault is a contributing, if not fundamental, causal factor.

According to Lloyd's Register, the greatest number of vessel losses can be traced to groundings, collisions, fires, and foundering, all of which invariably involve human judgments.

In 1972 the chairman of the American Hull Insurance Syndicate revealed that 85 percent of his claims payments were for human-error-caused casualties. U.S. Coast Guard figures for fiscal year 1974 show that only 15 percent of the vessels involved in casualties cited material or mechanical failures as the primary cause. These and other data point to the overriding importance of human performance in the operation of our merchant fleets.

This was the problem presented to the maritime transportation research board's panel on human error in merchant marine safety. During its early deliberations, the panel concluded that it required a somewhat unusual data base if it was to come to grips with the basic causes of human error in merchant marine casualties.

Although U.S. Coast Guard and National Transportation Safety Board records on major merchant marine casualties were accurate and well documented, the panel felt they represented legal truth rather than technical truth. What this means is that because of legal safeguards for personal rights during hearings and court cases, sometimes the real or underlying cause of a casualty is not determined.

The panel was convinced that full disclosure concerning casualties was seldom possible in a regulatory or judicial forum. As a result, the panel asked the Maritime Administration to conduct an in-depth survey of merchant marine personnel in order to determine the underlying causes of merchant marine human error casualties. This survey was undertaken by the National Maritime Research Center at Kings Point, and completed and released to the panel in July of 1975.

The survey conducted by the NMRC employed questionnaires and in-depth interviews with merchant marine operating personnel. Approximately 1,500 questionnaires were distributed throughout the U.S. merchant marine; 359 individuals responded for a return rate of 25.6 percent.

The analysis of the in-depth interviews and the questionnaire provided both quantitative and qualitative inputs to the panel. The qualitative element consisted of interviews and written responses to questions concerning dangerous conditions in the U.S. merchant marine. Because the panel's final report has not yet been approved by the National Academy of Sciences, I will limit my discussion to the findings of the NMRC in-depth survey and my personal opinions concerning training and licensing requirements for U.S. merchant marine officers.

The NMRC survey findings tended to group the causes of human error into roughly 2 dozen major categories. The most significant of these categories in terms of officer training and licensing requirements were: physical fitness, emotional stability, alcohol use, fatigue, personnel turnover and operational discipline.

For each of these categories, I will present samples of both quantitative and qualitative responses from the indepth survey. First of all, I think it is important to know who answered these questions: 10 percent were pilots; 20 percent masters; 38 percent deck officers; 8 percent chief engineers; 9 percent engineering officers; 10 percent tug and harbor craft operators, and 5 percent were in other categories.

PHYSICAL FITNESS

The questionnaire and interview responses to the issue of physical fitness aboard ships were quite revealing. When asked if they had ever been in a casualty or near casualty situation where a sudden illness, heart attack, fainting, stroke, dizziness, et cetera or someone aboard was a major causal factor, 15 percent of those responding to the question answered "Yes."

When asked if impaired eyesight of someone on the bridge had been related to an emergency condition, 23 percent of those responding to the question answered "Yes."

Of those responding to the question of eyesight, 33 percent identified the pilot and 25 percent identified the master as the individual experiencing the impaired eyesight.

When asked whether height or weight of a man had been a factor in an emergency situation, 14 percent of those responding to the question answered "Yes."

The qualitative responses concerning physical fitness were also very revealing. In one interview, a master revealed that his current second and third mates were 65 and 73 years old respectively. He was concerned about their abilities to climb ladders, inspect hatches, and adequately perform other necessary functions. The following are samples of quotations from the questionnaires.

A deck officer recalled:

Another guy would fail to call us when he got in trouble, then he couldn't stay down there to sort things out. He would begin to throw up. After a while I made him carry a bucket.

A deck officer recalled:

An AB was sent aloft. It was unknown that he was an epileptic and had run out of pills. None of this was known until the incident occurred. Such a thing should be noted on a man's Z-card. It could have happened on the wheel in confined waters.

Another instance:

The captain had a heart attack near Hell's Gate. The mate took over. The captain was 70 years old.

One pilot admitted:

I dropped my glasses and couldn't read the compass for the whole voyage.

A deck officer stated:

The master was virtually blind and refused to recognize such. He failed to recognize a radar interpretation creating a near casualty.

A master revealed:

Overweight prevented man from proper watch standing. He fainted if he stood on his feet for more than half an hour.

A chief engineer noted:

A man on watch could not change the atomizers because he was too old and fat to reach the work area.

The advancing age merchant marine personnel is becoming a problem; table 1 shows the median ages for the various categories of seamen operating in the U.S. merchant marine.

[The table referred to follows:]

TABLE 1.—SEAMEN'S EMPLOYMENT ANALYSIS, NATIONWIDE MEDIAN AGES (INCLUDING GREAT LAKES) 1962-63 TO 1970, 1972 AND 1974

Year	Licensed deck	Licensed engine	Radio	Staff	Unlicensed deck	Unlicensed engine	Cooks and stewards	Others ¹
1962-63....	45.2	47.3	48.2	42.7	39.9	43.1	47.2	37.4
1966.....	45.0	46.6	48.1	42.4	39.1	42.3	45.4	42.0
1967.....	45.2	46.8	48.3	43.6	41.8	44.3	46.5	38.6
1968.....	45.1	46.8	47.9	44.2	41.7	43.3	45.6	46.6
1969.....	45.4	46.7	48.4	45.0	42.1	43.3	45.9	41.3
1970.....	45.9	47.0	49.1	45.9	43.7	44.7	47.9	38.0
1972.....	47.1	48.0	49.9	47.1	45.1	46.3	49.0	43.7
1974.....	48.5	48.7	50.9	48.8	46.1	47.4	49.4	

¹ Includes medical, nuclear and other classifications.
Includes masters for the first time.

Mr. LEEPER. Life at sea can be very demanding, and on occasion require the highest level of physical and mental fitness. In the absence of required physical examinations, it is not clear that men in the upper age categories can always meet these demanding requirements.

EMOTIONAL STABILITY

Closely associated with physical fitness is emotional stability. When asked whether emotional stability of anyone aboard ship had ever been a contributing factor to a casualty or near casualty, 27 percent of those responding to the question answered "yes."

In the qualitative responses, numerous examples were given:

A master recalled:

His second officer was changing courses and plotting false positions with no apparent reason.

A deck officer noted:

Two men cut three fire hoses into pieces and threw them overboard . . . locked in ship's hospital . . . endangered ship and lives.

Another master revealed:

Emotionally unfit engineer stopped ship without orders while in dense coastal traffic.

ALCOHOL USE

The use of alcohol is apparently a significant problem for merchant seamen. More than half of those responding, 53 percent, cited instances where drunkenness of a crew member, officer or pilot was a factor in an incident.

Drugs on the other hand do not appear to be a serious problem with only 9 percent of those responding to the question indicating that drugs were a causal factor in merchant marine casualties. There are many references in the interviews of the use of alcohol and its detrimental effect on the performance of crewmen. The following are just a sample:

One interviewee:

I have sailed with three or four mates drunk, the captain still took her out, seaworthy or not, that's what he was being paid for.

Another interviewee:

The second officer was a good man when sober but every trip on night watch he would take over the watch while gassed up.

A master noted:

A man in an emergency resorted to drinking and fell overboard drowning.

In another instance:

The master was inebriated upon leaving anchorage; the chief mate quietly took over and an alert OM cooperated.

Another master recalled:

A problem drinker had whiskey aboard and had the whole watch drunk. Several mates saved the ship before running aground. No action was taken because of the seniority of the men.

A deck officer noted:

One bad day it seemed as if everyone on the bridge had a snoot full. The helmsman was unable to steer; mates on watch unable to obey orders; and the master gave improper orders.

FATIGUE

Of those responding to the question, 31 percent said that excessive fatigue had contributed to a casualty or near casualty; 61 percent of those answering said that the amount of time on watch or work tired the men involved.

In most cases, they were referring to captains on watch continuously for long periods and to men involved with docking, undocking and canal transits without adequate rest periods. The qualitative responses from the questionnaire were numerous:

One interviewee noted:

The chief mate suffers from chronic fatigue. I was up when they brought her in, worked hard all day and will be on the anchor when she goes out. Tomorrow morning I am working at 8:00 a.m. to give the boss instructions.

One pilot indicated:

Excessive tiredness caused hallucinations vivid enough for a pilot to order a course change in the middle of a narrow channel resulting in a grounding. He had been on duty continuously for 18 hours working in bad weather without a rest period.

Another master indicated:

Fatigue is dangerous, an all too common characteristic on short turnaround container ships. I have been up for 48 hours continuously, piloting, docking, and undocking.

Another interviewee stated:

I get more calls between the hours of 10 p.m. and 5 a.m. This is because with the contract inexperienced watch officers are on duty and no one else is around.

Today there are no permanent deck officers. The contract says they have got to get off after 6 months. The 12 to 4 is perpetually tired and he misses a meal. My 12 to 4 brought the ship in, stands a watch until 5 p.m. tonight and will take the ship out at midnight tonight. Nothing will happen but he is just not going to be sharp.

Excessive fatigue is characteristic of a merchant marine working environment and further emphasizes the need for physical fitness.

PERSONNEL TURNOVER

Excessive personnel turnover is another area of major concern in merchant marine casualties. Seventy-eight percent of those responding to the question in the in-depth survey felt that there was a slight to very high relationship between personnel turnover and casualties.

There were numerous responses in the qualitative portion of the interviews and in the questionnaires that referred to personnel turnover.

One interviewee noted:

At one time there were very similar ships and very similar cargoes. Men could take what they learned from one ship to another ship. Handling characteristics, engine rooms, and routines were all similar. Today, however, the fleets and cargoes are heterogeneous. A mate from a 500-foot ship can bid and get a job on a 900-foot ship.

Another indicated:

They can transfer to whatever they like without being qualified to handle the equipment. They can learn by on the job experience. Some captains and companies could care less about training.

Another interviewee stated:

Rotary shipping constantly recycles second and third mates. There is a constant training process educating about the hatches, winches, bridges, etc. Although the concept is good, there is less officer stability.

OPERATIONAL DISCIPLINE

In addition, there seems to be a failure in operational disciplines. Twenty-six percent of those responding to the questionnaire recalled casualties resulting from failures to follow operational procedures. Thirty-two percent of those said that the procedures were not followed because personnel "did not want to bother." Forty-three of those said that when they reported aboard a new ship they were usually left to shift for themselves. There are a number of qualitative responses to this problem.

One interviewee noted:

Some masters even expect you to work on charts running the coast. When the vessel is on Iron Mike, the mate on watch can be working in the chart room and both he and his AB and OS are absorbed in other pursuits. No one is minding the store.

When there is a breakdown in operational disciplines, there are indications that appropriate disciplinary action is rarely taken for violations of regulations or rules. For instance, 44 percent of those responding to the question recalled a casualty or near casualty relating to drunkenness in which no disciplinary action was taken.

The problem of physical fitness, emotional fitness, alcohol use and fatigue can be addressed through the effective use of periodic required physical exams. As a matter of practice, many of those sailing do have some form of periodic physical exams.

In some cases, companies require preemployment physicals before a job assignment. Only 16 percent of those queried in the interview indicated that they had not taken preemployment physicals. Some 22 percent indicated that they had taken a physical before every ship.

As a matter of practice, if a situation develops where there is some question concerning a man's physical fitness, he is examined by a Public Health Service doctor. If he passes a Public Health Service examination, he is given a fit for duty slip and is then returned to duty.

However, Public Health Service doctors are not always willing to deny a man his employment by withholding a fit for duty slip. In some cases, the doctors are not fully aware of the physical requirements of a working life at sea and are seldom aware of the extremely demanding requirements and critical responsibilities of some positions aboard ship.

A classic example in this regard involved an officer aboard a U.S.-flag ship who developed a severe psychoneurotic condition. In one instance, he became disturbed and cut off and ate his finger. The incident was recorded in the ship's log and the officer was repatriated from a foreign port and his merchant marine document was surrendered.

Eight months later he appeared before the U.S. Public Health Service doctor in Staten Island, New York, and received a fit-for-duty slip which said "the patient is psychiatrically fit for duty." Within the next year, the man had to be repatriated once again. This time from Calcutta with a junior officer as an attendant.

It would be inaccurate and unfair to conclude from the NMRC in-depth survey that the conditions cited are common to all operating personnel in the U.S. merchant marine. Obviously, our merchant marine has many competent, physically and mentally fit officers who continually meet the highest standards of safety through prudent and efficient operation.

However, the merchant marine is becoming a potentially more hazardous mode of transportation and we can no longer tolerate even a few officers who are unfit for whatever reason.

The conditions revealed in the survey have not been allowed to exist in air transportation, yet the potential for destruction is as great if not greater in the merchant marine. I know of no air crash that even approaches the level of destruction that resulted from the *Imo/Mont Blanc* collision.

The task of upgrading the safety performance of merchant marine personnel will require a dedicated and sustained effort throughout the maritime community. Increased physical and mental standards can be enforced through required physical examinations. Problems in operational discipline and lack of vessel familiarization can be treated through improved training and the use of dynamic testing in the issuance and renewal of licenses.

No officer should be qualified to stand a deck or engine watch on a ship unless he has had previous experience or special training on that type of ship.

Our maritime training institutions, both public and private have taken important initiatives in recent years. The union schools, for instance, should be commended for their efforts in upgrading the competency of their members.

In fact, it has been the unions that have taken the initiative in re-training and in the use of simulators. Kings Point is also a vital element in any overall program to improve the safety performance of the merchant marine. Its facilities, including the new simulator at the NMRC, are among the finest in the world. Its graduates are competent, well educated, and physically fit. Kings Point graduates are badly needed as officers in our merchant marine. They must be given an equal opportunity to serve.

In terms of section 7 of H.R. 10413, I believe three specific steps should be given serious consideration:

1. A program of required annual physical examinations should be instituted for personnel in key operating positions aboard ships of the U.S. merchant marine. These physical examinations should be based on a thorough study of the physical requirements by job description and vessel type. Doctors should be fully briefed on the seriousness of these examinations, and should be held responsible for their judgments in declaring men either fit or unfit for duty.

2. A mandatory retirement age should be established for key operating positions aboard ship.

3. The U.S. Coast Guard should develop and institute dynamic proficiency checks either aboard ships or with simulators for use in the issuance and renewal of licenses.

In the years of the 1980's maritime transportation will have an enormous impact on the energy and environmental concerns of both this country and the world. Not only will ships transport vast quantities of the world's resources, but they will carry with them a continuing potential for creating death, destruction, and pollution on a scale unmatched by any other mode of transportation. This condition represents a grave challenge not only for the maritime community but for the Nation as a whole.

Thank you.

Mr. DOWNING. That is quite an interesting statement, Mr. Leeper, very unique statement.

Mr. Biaggi?

Mr. Biaggi. I agree with you, Mr. Chairman. Most informative and interesting, especially since it points out the obvious need for addressing ourselves in one form or another to the physical fitness of operating personnel.

The second suggestion, on the mandatory retirement age, intrigues me.

What would you think would be the appropriate time to retire? Should age be dependent upon conditions?

Mr. LEEPER. Mr. Biaggi, I would follow the example of the airline industry. As you know, they use the 60-year mandatory retirement for all airline pilots.

I do not really know what they base the 60-year limit on, but I know they use it, and I think that the responsibilities and duties of the merchant marine officer are very similar to those of an airline officer.

Mr. Biaggi. I do not know if you can really equate all industries in an identical fashion. Conceptually, yes, I agree with you in light of your very persuasive presentation. Today more than ever before people are living longer and are in better condition.

You talk about 60 years of age. To many, many people that is the prime of life, and to cut them off at that point, to arbitrarily have them retire, would be cruel, to begin with; and I am not sure it would be so wise administratively. It is the notion of condition in that age limit, that is the physical condition should be reviewed, and an arbitrary cutoff stage of 60 would leave me cold.

I know more and more in industry, and in public life there is a statutory or mandatory retirement, but I am not so sure that age 60 on that approach would be the answer.

Certainly, an answer should be found if you have accomplished nothing more today, you have accomplished a good deal that you have directed the attention of this committee to an important area, at least for me, that has been overlooked.

Thank you, Mr. Chairman.

Mr. DOWNING. Mr. McCloskey?

Mr. McCLOSKEY. I have no questions, Mr. Chairman.

Mr. DOWNING. Mr. Sarbanes?

Mr. SARBANES. Mr. Leeper, I want to thank you for a very interesting statement. I understand that the statement is based on a study that has not been released by the Academy of Sciences, is that correct?

Mr. LEEPER. That is correct, sir.

Mr. SARBANES. And do I also understand that it is your statement, not the Academy's statement and that you have now left the Academy?

Mr. LEEPER. I will be leaving the Academy on Friday to join a transportation consulting firm.

But the opinions I have made are my own opinions, but they are drawn from the study.

Mr. SARBANES. Do you know when the study will be released or become available as an official study of the Academy?

Mr. LEEPER. It is now in review throughout the Academy of Sciences, and I would estimate within 2 months.

Mr. SARBANES. Within 2 months?

Mr. LEEPER. It should have completed its review.

Mr. SARBANES. What was your role in the study specifically?

Mr. LEEPER. I was the project manager. The Academy selected a group of experts who actually served without compensation in the national interest to actually conduct the survey. And I worked directly for them.

Mr. SARBANES. Did the study of human error in merchant marine safety give any insight into what kind of person might best make an officer in the merchant marine?

Mr. LEEPER. No, sir; I do not believe we addressed that.

There was a great deal of concern. We had two psychologists on the committee about the type of people we were attracting and what types of people who would stay at sea. And they felt that some long-term study should be made so that we could attract the right caliber of people into the merchant marine.

They feel there are conditions of living, the problem of being apart from your family, things of that nature, that have tended to make some, the high caliber people, avoid serving in the merchant marine.

Mr. SARBANES. I would assume questions of temperament would be quite important if you engaged in that approach since you do have some rather unique working conditions aboard ship.

Mr. LEEPER. Yes, sir; but I can recall no determinations that were made in that area.

Mr. SARBANES. Was there any examination in the course of this study with respect to the other countries that tried to reach some conclusions as to why they had succeeded in having a better safety performance than the United States with respect to merchant marine casualties?

Mr. LEEPER. The initial study the Academy did in this area was in 1970, and that was a comparison of our merchant marine safety program overall.

We had concluded that the United States had the highest level of regulation in the world of the countries that we reviewed, but the United States did not have the highest level of safety performance.

One of the contributing problems to this, perhaps, was the age of the ships. We did note that the United States had older ships than some of the other countries.

Nothing was determined about the caliber of the people serving, however. Opinions were expressed at the time that the British, for instance, had a more professional merchant marine and they usually made it their career and stayed with it, and it was a profession. And perhaps this was an answer. And there was a feeling that in the United States in some instances, people would leave the sea and would go back, and it would not be their primary profession.

There was no determination made other than those opinions.

Mr. SARBANES. Well, now, when you say the British had a more professional merchant marine, I take it that means they went into it and stayed with it and had continuous employment in the merchant marine, is that correct?

Mr. LEEPER. They have always had a reputation for being the center for merchant marine activities.

They do provide officers, not only to their own fleet, but to the Liberian fleet and others.

Mr. SARBANES. Did your study touch at all about how the human error variable is affected by continuous employment as opposed to intermittent employment?

Mr. LEEPER. No, sir, except that we did refer to some studies done in the airline industry concerning the level of skill that you maintain if you had to layoff for a certain period of time.

There is some indication, at least in the airline industry, that there is a retraining problem even if you are off for several weeks and come back in, that you do have to relearn some of your skills. Other than that, there was nothing done.

Mr. SARBANES. Thank you, Mr. Chairman.

Mr. DOWNING. Mr. Emery.

Mr. EMERY. Thank you very much, Mr. Chairman.

I have no questions, but let me say this is an interesting and comprehensive statement.

I would like permission to provide some questions in writing at a future date to be answered for the record.

Mr. DOWNING. Without objection.

Mr. ZEFERETTI, any questions?

Mr. ZEFERETTI. No questions.

Mr. DOWNING. Mr. Leeper, was any comparison made in the human error in the merchant marine and the Navy?

Mr. LEEPER. No, sir; we made no comparison.

Mr. DOWNING. This is the first time the subcommittee has been presented with this question in such detail, and I think it is quite interesting.

I think perhaps we should address ourselves to this question, that out of 15 countries, we rank 11th in safety at sea and, yet, we are the highest regulated country.

Mr. LEEPER. Yes, sir; that is correct.

Mr. DOWNING. Well, Mr. Leeper, you have made a significant contribution to the committee, and we do thank you and wish you well in your new responsibilities.

Mr. LEEPER. Thank you.

Mr. DOWNING. The next witness is Capt. Gerald L. Johnson, executive vice president, International Organization of Masters, Mates & Pilots.

Captain Johnson, you may proceed.

STATEMENT OF CAPT. GERALD L. JOHNSON, EXECUTIVE VICE PRESIDENT, INTERNATIONAL ORGANIZATION OF MASTERS, MATES & PILOTS, INTERNATIONAL MARINE DIVISION OF ILA, AFL-CIO, ACCOMPANIED BY JAMES CARR, LEGISLATIVE COUNSEL

Captain JOHNSON. Thank you, Mr. Chairman.

My name is Captain Gerald Johnson, executive vice president of the International Organization of Masters, Mates & Pilots, International Marine Division of ILA, AFL-CIO.

I have with me today legislative counsel, Mr. James Carr.

Before I make our statement, let me say that I am myself a graduate of King's Point. I have sailed as master in tankers and container ships up to my recent election to office.

As I have only recently assumed office in New York, and have been heavily involved for sometime in negotiations with the owners, there are many areas I am not totally familiar with. However, I will endeavor to answer any questions you may have, and if I am not able to answer any questions, rest assured that we will respond in a timely manner with any information you may request on the bills.

On behalf of most of the deck officers and masters sailing on American ships, I wish to thank you, Mr. Chairman, and the members of your subcommittee for giving us this opportunity to present our views in connection with your consideration of ILR. 10500 and related bills concerning maritime training.

We wish particularly to thank Congressman Ellsberg of your subcommittee for bringing to the attention of the subcommittee at its hearing on October 30, 1975, the fact that some of the viewpoints then being expressed were completely one-sided and required some response.

Indeed, Mr. Chairman, although we are opposed to this group of bills for reasons I will explain in a moment, and while we wish to be on record with this opposition, we have sought this opportunity to present our views primarily to correct some of the inaccurate, irresponsible and inflammatory statements that have previously been made before this subcommittee by another witness representing the alumni association of King's Point.

First, we wish to state our general and vehement opposition to any measure which, at this time, encourages educational institutions to train young men as deck officers for nonexistent seagoing billets. We agree with the viewpoints previously expressed that it is a national disgrace to be training maritime officers when there are no jobs available for them upon graduation, but contrary to the suggestions made here previously, the fault for this lies not with the maritime unions, but with the Congress and the White House.

If the Emergency Transportation Security Act of 1974 had been signed by the President or had been passed by the Congress over the President's veto, most of the problems we are now discussing would be moot.

The fact of the matter is, Mr. Chairman, that there are no jobs for graduates of maritime academies and similar institutions simply because there are not enough American ships and not enough cargo being carried on American bottoms.

We have been criticized for closing our rolls and not accepting new graduates from these maritime institutions. What would our critics have us do, open our rolls, accept new members, and spread poverty throughout maritime labor? Would our critics have us provide four, five or six men for every available job in the industry? Would our critics have us adopt membership policies that would force maritime deck officers to live on one-sixth of a fair wage?

Our offshore division, which provides the masters and mates for American ocean shipping, closed its membership rolls in 1970 because of the fast-dwindling supply of jobs on American ships. That trend has continued. When the rolls were closed, there was a self-repealing provision in the measure that provided for reopening of membership when the ratio between the number of available jobs to men available to fill those jobs reached a level of 1 to 1½. That level still eludes us.

We do not need to be reminded of how unfortunate this situation is. We do not need a nonseagoing King's Point graduate to tell us that our membership age distribution is being distorted, that we are running into pension problems, that the average age of our membership is increasing, or of other alarming results to our dying maritime industry. We are painfully aware of the multifarious problems resulting from lack of jobs in the industry.

The answer to these problems does not lie, however, in creating new more difficult problems, and the answer certainly does not lie in encouraging young men to become trained as maritime officers when there will be no jobs available for them upon their graduation.

If I may, Mr. Chairman, I should like now to address myself to a few specific inaccuracies that no doubt have caused some concern on the part of members of this subcommittee. It should be noted, first of all, as I have indicated earlier in my statement, that it is not the membership rolls of the masters, mates, and pilots that have been closed, but only of the offshore division of the organization. Our pilots division still accepts members, our inland division still accepts members, and our new Government employees division, which is in the process now of formation, will soon be accepting members.

Second, previous testimony has implied that our organization is accepting dues from young academy graduates under false pretenses. This allegation we emphatically and unequivocally deny. It is made of whole cloth.

In fact, what is being done is that in order to alleviate the burden of our closed offshore division membership rolls on young academy graduates, we have explained to them at length our membership situation, the job situation, the reasons for our closed rolls, and the outlook for the reopening of those rolls.

We have then stated to these young men that if they will pay dues, we would waive their initiation fee and carry them on our rolls as applicants for membership, which will permit them to take a sea-going job with our contracting employers as an applicant whenever a full member is unavailable for the job. It seems to us that this is something for which we should be given credit rather than criticism.

It was also implied that if an applicant is bumped off the job at some distant port by a full member, he is left stranded. In fact, this is not so. Under our contract, he would be provided transportation home; and in current negotiations we are endeavoring to secure agreement from the shipowners that once signed on, an applicant would be assured a minimum job assignment of 120 days.

There was an implication in prior testimony that industry schools, such as our Maritime Institute of Training and Graduate Studies, are subsidized by the United States. This is clearly inaccurate and inflammatory. The school is paid for by employer contributions to a jointly administered labor-management trust established for training and upgrading our maritime officers.

Although the statement was made in prior testimony that our maritime institute initially licenses deck officers, that is not so.

Because of our recognition of the job problem long ago, we discontinued initial licensing training. As the name of our school implies, all training there is at least of a graduate nature and is for the purpose of increasing the skills of existing deck officers. The school is supported by employer contributions, and neither the students nor the school receive any direct Government subsidy.

Finally, an implication was given in prior testimony that our membership policies endanger national security by making it impossible for us to man vessels in an emergency.

Mr. Chairman, the record of our union and of the maritime industry generally during national emergencies speaks for itself.

In the Vietnam war, for example, we manned 700 ships in place of the 350 we ordinarily were manning. Our membership stands ready at all times to give of their services above and beyond the call of duty in the national interest.

If a future emergency should arise that requires the service aboard ships of deck officers now holding shoreside jobs, I can assure this committee that our members will be equal to the task, as they have been in the past. Our members have never let our country down and will never do so in the future.

Mr. DOWNING. Thank you very much, Captain.

Captain JOHNSON. Thank you, Mr. Chairman.

Mr. DOWNING. Mr. Biaggi.

Mr. BIAGGI. Before we comment on your statement, I notice you were in the room when Mr. Leeper testified.

What is your reaction to a mandatory retirement age?

Captain JOHNSON. I would favor some mandatory retirement age.

Mr. BIAGGI. Do you have any suggestions or thoughts?

Captain JOHNSON. I would think 65 certainly would be a reasonable figure. I believe between 65 and 70 years of age.

Mr. BIAGGI. What about the physical fitness aspect of the personnel, the examination and the like?

Captain JOHNSON. I would like to study his proposal but, obviously, we want a physically able man to stand a bridge watch absolutely.

Mr. BIAGGI. You have no objection to examinations?

Captain JOHNSON. No, sir.

Mr. BIAGGI. Very interesting. Thank you.

I understand that the thrust of your statement is that we should not have an abundance or surplus of graduates when we have a bad job market.

Is that a fairly accurate impression that I have?

Captain JOHNSON. Yes; that is the real problem, to encourage a young man to go into the maritime industry and not have a job for him. It just does not make sense.

Mr. BIAGGI. Well, then, if we can pursue that line of thinking, in light of the testimony we have received so far, the logical conclusion, at least in my judgment, would be that we would have to eliminate, either eliminate or reduce some of the classical schools, either the Federal or the State schools; is that a fair conclusion?

Captain JOHNSON. I would not want to see elimination of the Federal schoolships or the State schoolships, but I think they have to be realistic in not turning out more men than there are jobs available in the going market.

Mr. BIAGGI. We have had a number of reports in connection with the need of the industry. And apparently the needs are very flexible and are quickly changing.

In 1971 they said the needs were minimal, and a 1974 report said to the contrary. So it would appear to me that no educational institution could vary that quickly. At least they have to have a constant flow.

Administratively, it is almost essential, and to deal with the problem, it is more practical than having a widely ranging graduating class.

You stated that the union school did not receive any subsidy.

Captain JOHNSON. That is correct.

Mr. BIAGGI. Well, is it a fact that the shipping industry through the operating subsidy, makes contribution to the trust fund?

Captain JOHNSON. Actually, the contribution to the trust fund is part of the collective bargaining in which the owners agree to pay a number of dollars to the fund, and that is the source of the fund, not of the sources for the school.

Mr. BIAGGI. We do not differ on that score, and I would like to clear this point up because I think it is a vital point.

The owners agree to pay through collective bargaining. There is no quarrel with that. And the same owners come to the Federal Government for subsidy. Whatever they agreed to pay in their collective-bargaining process relates directly to their operating costs.

You know, those costs find themselves worked into the legislative process where the Federal Government provides moneys for the ship-owners, including the operating subsidies, so it follows logically that

we find Federal moneys going into the schools. And as a result of collective bargaining, they are going in at a lesser amount.

Captain JOHNSON. Not all of the collective-bargaining agreements are made with subsidized companies. Some are nonsubsidized companies, and they, in turn, pay the same contribution rate, the same fixed fee.

Mr. Biaggi, not all are subsidized companies.

Mr. Biaggi. That is an interesting fact.

Mr. McCLOSKEY. Will the gentleman yield?

Mr. Biaggi. Yes.

Mr. McCLOSKEY. I wonder if the witness could comment on table 10, page 15, of the report of the ad hoc committee?

This figure comes to 72 percent. Is that the figure that can be traced to Federal funds going into the operation of the schools?

Captain JOHNSON. I am sorry, but I did not hear that.

Mr. McCLOSKEY. Seventy-two percent, is that the proper amount of the cost of this particular school which is funded by Federal funds?

Mr. Biaggi. Well, that is the contention. That has been my understanding, that these moneys that leave the operating subsidy get into the schools.

Mr. McCLOSKEY. In the committee's report, it says the average subsidy rate for these contributions is 72 percent.

This is the MEBAA school?

Mr. Downing. This is a different school.

Mr. McCLOSKEY. My question is, can we fix what the amount is for this particular school?

Captain JOHNSON. Would you state the question again?

Mr. Biaggi. What percentage of the funds for the school in question come from the shipping interests?

Captain JOHNSON. Let me say that I am not a trustee of the mates program. We would be glad to respond to you later with statements and so on.

I am not that familiar with the mechanics and so on as far as that goes, other than it is a creation of the collective-bargaining agreement.

Not all of the companies involved in collective bargaining are subsidized companies.

Mr. Biaggi. Would you provide the committee with a breakdown of the shipowners that make contributions, those that are subsidized and those that are not?

I think that is a vital point.

Mr. Downing. Will the witness supply that for the record?

Captain JOHNSON. Yes, I see no problem with that, and will be glad to supply the committee with any information you want.

[The following was received for the record:]

INTERNATIONAL LONGSHOREMEN'S ASSOCIATION,
AFI-CIO-CLC,

Washington, D.C., February 2, 1976.

Hon. THOMAS N. DOWNING,
Chairman, Subcommittee on Merchant Marine, U.S. House of Representatives,
Longworth House Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: As I indicated to you in my last letter dated January 2, 1976, certain information was to be supplied by the Masters, Mates and Pilots that was requested at your December 2, 1975 hearing. I am pleased to provide it herewith.

One request was for the number of applicants for membership on the rolls of the International Organization of Masters, Mates and Pilots who are paying full dues. In fact, none of the applicants are paying dues as such because only members in good standing are required to pay dues. In order to remain in good standing as an applicant, however, it is necessary for applicants to pay a quarterly service fee of \$75.00, which is the same as the amount of dues paid by members in good standing. Applicants are not, however, required to pay an initiation fee, which they would pay only upon entry into the Organization as a member in good standing. The number of applicants in good standing on the rolls of the Organization as of December 31, 1975 was 234.

Information was also requested concerning the amounts of funds contributed by subsidized and non-subsidized companies for support of the management-labor jointly managed Maritime Institute of Training and Graduate Studies since 1970. Unfortunately, the figures we have cannot be broken down to reflect the precise amount contributed for the School. Contributions are made by signatory employers to the MM&P MATES (Maritime Advancement, Training, Education and Safety) Program. The MATES Program finances all operations of the School, as well as providing food and lodging for students and compensating them for transportation to and from the School. Approximately 5,000 MM&P members each year are eligible to attend. The Program also engages in related training programs and activities, including those of the United States Government, international organizations and private institutions. We are supplying below the amounts contributed by signatory employers to the MATES Program broken down as between subsidized and non-subsidized companies.

It should be explained further that the School did not commence operation until 1972, and consequently there are no figures for 1970 or 1971; moreover, the figures for 1975 include only seven months. In addition, it should be noted that the contributions for the year 1973 included about \$1,100,000 in deferred contributions that were actually applicable to 1972.

Finally, a further request was made that we indicate how much of the contributions paid by subsidized companies are reimbursed to those companies by the federal government in operating differential subsidies. This is a figure which we cannot supply. It varies from company to company and is a matter of contract between each company and the Maritime Administration. That information probably can be obtained from the Maritime Administration but is not available to us.

Total contributions to the MATES Program for the periods shown are as follows:

Period	Total cash	Paid in by subsidized companies	Paid in by others
Year—1972.....	\$1,964,955	\$222,470	\$1,742,385
Year—1973.....	6,231,810	2,132,208	4,099,602
Year—1974.....	4,793,499	1,644,010	3,149,489
(7 mo only—1975).....	4,255,476	1,582,625	2,672,851
Total.....	17,245,640	5,581,313	11,664,327

If you or any other member of the Subcommittee desires additional information, we will be happy to supply what we can.

Best personal regards.

Sincerely yours,

JULIAN H. SINGMAN,

Washington Counsel and Legislative Representative.

Mr. BLAGG. In testimony that this committee received today and at other times, there has been a charge of discrimination against graduates of nonunion schools.

You stated that your Offshore Division is the only one that has closed door working conditions. I do not know if this applies to you, but Admiral Kinney testified that the graduates of a nonunion school are classified in different groups.

Are you familiar with that process?

Captain JOHNSON. Yes, sir.

Mr. BRAGG. They are classified in group 4 while the graduates of the union schools are classified in group 2.

The group 2 classification has to be exhausted before they get to the group 4 classification.

Is that an accurate statement in your opinion?

Captain JOHNSON. That applies to another licensed union. I am sure you will hear more of that particular group's shipping.

In the masters, mates and pilots, our membership are all group 1 in the sense that they have the right to bid for a job on the board. The applicant has a different status. He pays a service charge, and if no one takes the job, he is entitled to the job and hopefully in this current collective bargaining, he is going to be able to stay longer on a vessel if a job is unfilled by a permanent member.

We do not really have that group system that the engineers do have, and I would leave it to my good friend to explain that system to you.

Mr. BRAGG. In your Offshore Division do you have graduates of the nonunion schools?

Captain JOHNSON. Graduates of nonunion schools?

Mr. BRAGG. Yes. Federal and State schools.

Captain JOHNSON. Yes; the Offshore Division consists of graduates like myself who have sailed. Some have come up through the hawse pipe, and others have come through the Navy and Coast Guard, but they come from various seagoing aspects.

Mr. BRAGG. I do not know if I made my question clear. Perhaps you responded, but I did not understand you.

On page 3, you say the membership is closed only in the Offshore Division of the organization.

Captain JOHNSON. That is correct. That is the Offshore Division.

Mr. BRAGG. Let me put the question to you again.

Does the membership of the Offshore Division have graduates of Federal and State schools?

Captain JOHNSON. Yes, it does. I was a graduate of a Federal school, and I belong to the Offshore Division, but I could have come out of the Navy, used my time to get a license, or come out of the Coast Guard, or could have worked on deck and earned enough time so I could take the license.

Mr. BRAGG. When did the Offshore Division close its doors?

Captain JOHNSON. We closed the books in 1970 in the Offshore Division.

Mr. BRAGG. But it was open prior to that?

Captain JOHNSON. Prior to that, yes, sir.

Mr. BRAGG. Thank you.

Mr. DOWNING. Mr. McCloskey.

Mr. McCloskey. Captain, just to clarify this question that we asked earlier, I was referring to 1974, to the figures on the report on the MEBA School, and it indicated that the payments from subsidized operators totaled in 1974 roughly \$596,974, not quite \$600,000, which was paid by subsidized operators to the MEBA Fund.

The average subsidy rate the Government paid to those subsidized operators in that year was 72 percent, so that 72 percent of the subsidized operators' contribution came from the Federal Government.

We worked that one out to about \$1,340 per student in the MEBA schools, as a Federal subsidy through the indirect route of the subsidized contributions.

If you could give those figures when you submit the answers. What percentage of your contributions come from subsidized operators, what does not, and what is the average subsidized rate? Then we can compute it. That will keep our records straight and contribute to the hearing record.

Mr. DOWNING. Insofar as his school, the MEBA, is concerned.

Captain JOHNSON. Yes.

Mr. McCLOSKEY. That might help us. Please calculate from 1970 up to the current year.

Captain JOHNSON. We will provide it at a later date.

Mr. McCLOSKEY. I have no further questions.

Mr. DOWNING. Mr. Sarbanes?

Mr. SARBANES. Captain Johnson, I just want to follow on that.

It is important, I think, and maybe the committee staff should do this work rather than you, to submit a figure of the sort that Mr. McCloskey asked for. We have to be certain that the contribution that that employer was making was, in fact, includable in the category that was entitled to a subsidy.

As I understand it, you get some contribution from nonsubsidized employers.

Captain JOHNSON. That is correct.

Mr. SARBANES. So obviously there would be no indirect Federal moneys there, second, you receive contributions from subsidized employers, but you would have to be certain that those contributions are includable by them in a category which entitles them to subsidy.

Otherwise, their contribution to you is really the same as one made by a nonsubsidized employer.

As you compile those figures you better keep that distinction in mind, otherwise you may get a figure that is really not accurate for the problem that is before us.

Captain JOHNSON. I understand, sir.

Mr. SARBANES. I am interested in knowing about the self-repealing provision that you adopted when you closed the rolls.

It seems to me a rather constructive idea.

When the number of people seeking jobs in relationship to the jobs available, dropped below $1\frac{1}{2}$ to 1, then the rolls would reopen automatically, is that correct?

Captain JOHNSON. That is correct, and we take in a number of members that would be able to fill this vacancy.

Mr. SARBANES. Do you have any idea what the ratio is at the moment?

Captain JOHNSON. Well, it is about 1.8 to 1 at this moment, depending on how you look at the figures, but the problem has been with the declining ship market and the declining industry, with tankers idle, and so on, that there is just not enough men retiring.

There are not enough men leaving the industry to enable us to ever get to that $1\frac{1}{2}$ to 1. It is still eluding us.

Hopefully, in the collective-bargaining agreements we will be able to do something, and in pension form, to increase the base pension so it will encourage the older guy.

Our average age is 52 or 53, a little lower than earlier studies indicated. We are trying to attract that guy to leave the industry to make room for the young guys.

Mr. SARBANES. How long has the ratio been about 1.8 to 1? What was it in 1970 when you closed the rolls?

Captain JOHNSON. It was almost $2\frac{1}{2}$ to 1.

Mr. SARBANES. Why the decline since then?

Captain JOHNSON. Only because of people who have decided to leave the industry.

Maybe they have their pension, or we lose about 100 a year by death and just attrition.

Mr. SARBANES. Now, with respect to the question Mr. Biaggi asked, actually the source of men that you could have on open rolls would be these academies, would it not?

Captain JOHNSON. Of course, we would be delighted to take in the Academy graduates. It is not easy to have one after the other come up and ask what are our opportunities, what am I going to do.

Well, what do you tell them? I say look, we have closed our books. Of course, we want to take in young graduates.

Mr. SARBANES. I notice you pointed out you try to explain to these young men what the situation is that faces them in the industry.

Do the academies, before they take them in for the 4-year training program try and explain to them what may lie ahead of them?

Captain JOHNSON. I really do not know. I would not know what the academies tell them.

I went to the Academy during the war years, and I left the farm and went to sea and stayed there, so I do not know what they tell them now.

Mr. SARBANES. Thank you, Mr. Chairman.

Mr. DOWNING. Not through a lack of courtesy, but I completely failed to recognize our very able chairman, Mrs. Sullivan.

Mrs. SULLIVAN. Thank you, Mr. Chairman.

I was unavoidably detained. I hoped to be here for the whole meeting this morning, but I could not, and because I did not get to read your testimony or hear it, I will not ask any questions at this time.

Thank you, Mr. Chairman.

Captain JOHNSON. Fair enough.

Mr. DOWNING. Mr. Emery?

Mr. EMERY. Thank you very much, Mr. Chairman.

On page 4 of your prepared statement, Captain Johnson, you address yourself to the question of closed rolls, and suggest that the policy has been adopted by the union to offer a potential applicant a waiver of his initiation fee in order to carry him on the union rolls as an applicant for membership. You do that if he will only pay the regular union dues.

How much is the initiation fee?

Captain JOHNSON. Actually, the mechanics of that is a little different. There is a typo here. The applicant pays a \$75 service charge per quarter.

Actually, before 1970 when we were taking in members it was \$1,000. But since we have not taken in any new members there is nothing that goes towards initiation. It is a \$75 flat fee per quarter.

Mr. EMERY. So you are saying essentially there is no initiation fee. Captain JOHNSON. That is right.

Mr. EMERY. Further, it explains if the potential applicant would pay the union fees he would be possibly employed by the contracting employer in the event a full time member was not available for a particular job.

How often does that happen?

Captain JOHNSON. Well, unfortunately, our own membership is waiting in some cases as much as 6 and 7 months.

What we did in 1972, Mr. Emery, was to go to 180 days of employment. It was really to share the poverty. It did not create new jobs, but it did share the work, and a man was limited to 180 days of employment.

Then he would take his vacation, and wait on the beach for another job. The average time on the West Coast runs about 6 or 7 months past his vacation to get a job, so you can see the applicant does not fare very well.

Mr. EMERY. So essentially the arrangement that you list on page 4, as a practical matter, never comes to pass.

Captain JOHNSON. It does, but it is not very often, unfortunately.

Mr. EMERY. So essentially, even though the initiation fee is not being accepted, because you are not initiating anyone, you are, in fact, accepting union dues from individuals who are not yet members of the union, holding out the possibility to them that maybe sometime they would be able to accept some temporary employment, but you are unable to give them any indication of when either they may be able to continue to get full union membership or, in fact, have an opportunity to work at all.

Mr. JOHNSON. Well, no. We are not going to lead him down a blind road. We are not going to take his money if we cannot offer him something.

Mr. EMERY. What are you offering him?

Captain JOHNSON. Well, we try to get him a job.

Mr. EMERY. But you have just told me that is almost impossible.

Captain JOHNSON. The chances are slim, for instance, in New York, where the other day there were two applicants that took a job that were able to get out.

Mr. EMERY. In your opinion, is it worth the \$75 a quarter for the possibility that the job might become available under those circumstances?

Captain JOHNSON. Well, I would say yes. I did it because I wanted to go to sea, and unfortunately there are not the opportunities we would like to have, but if a guy really wants to stick it out, he can get work. It is not that easy. They are completely aware of what the problem is, Mr. Emery.

We are not trying to kid them that we have 20 jobs sitting on the board there for them.

Mr. EMERY. Does the payment of an initiation fee before full membership in any way guarantee that the applicant will be considered for union membership before the 1.5 to 1 ratio is achieved?

Captain JOHNSON. No; it is just the service charge.

Mr. EMERY. What do you mean by service charge?

Captain JOHNSON. The \$75 per quarter.

Mr. EMERY. But this is union dues.

Captain JOHNSON. It is a service charge in his case, not dues. That does not go towards the initiation.

Mr. EMERY. How many applicants for membership are presently paying full union dues in anticipation of some offering?

Captain JOHNSON. We could respond to that later.

Mr. EMERY. I would like to have that later, if you could.

Captain JOHNSON. Right.

Why not ask that again, and we will be able to respond?

Mr. EMERY. Fine. I wanted to know how many applications for membership are now paying full union dues in anticipation of a temporary job in the case of a full member being unavailable.

Captain JOHNSON. We will respond to that. I do not really have that. We can get you the information.

Mr. EMERY. We know exactly how many applicants there are, and so on. We had quite a few at the start of 1970. By the time 1975 rolled around a lot of guys got discouraged, and went off in other areas, or we got them into the inland division, or other areas, and it has dwindled down.

Mr. EMERY. I would like to move along to another point, if I may.

You indicate on page 3 that the membership is not closed in your inland division, the Government employees division, and pilot division.

However, the membership is closed on the offshore division. What is the relative size of these various divisions?

In other word, how many seamen are normally employed in the offshore division compared with the others in aggregate or separately?

Captain JOHNSON. There is approximately 5,200 members in the offshore division. There is about 4,400 of them roughly that actively seek employment, the group that just keeps their membership, and so on.

In the inland division approximately 2,100 men are involved, and the pilots division has about 800 men involved.

Mr. EMERY. How about your new Government employees division?

Captain JOHNSON. That would run about 350.

Mr. EMERY. So it is safe to say that the offshore division is by far the largest, in fact, totaling about twice the aggregate of the other divisions?

Captain JOHNSON. That is correct.

Mr. EMERY. What are the differences in responsibilities and job descriptions between the members of the offshore division and those, say, in the inland division?

Captain JOHNSON. Well, the offshore division members would be a third mate, a second mate, chief mate or master, who is sailing under a collective bargaining agreement.

The inland division would be a mate on a towboat or a barge. He is a seagoing guy, but he is an inside man more than he is an outside man.

Mr. EMERY. Can I say then that members of the offshore division generally would acquire greater job skills, and more familiarity with ship techniques and equipment rather than the inland division?

Captain JOHNSON. It is a different industry.

Mr. EMERY. A different aspect of the industry, but basically my statement would be considered accurate?

Captain JOHNSON. That is correct.

Mr. EMERY. Do you know of any circumstances whereby an applicant would be granted full union membership prior to the agreement on the 1.5 to 1 ratio you indicated?

Is it possible for a person somehow to become a full union member ahead of other people that may be waiting in line faithfully for that magic figure?

Captain JOHNSON. No; I do not see how that is possible.

Mr. EMERY. You would say unequivocally that no man is granted full union membership prior to any other member who has been waiting in line?

Captain JOHNSON. The planning on taking in applicants, depending on this ratio, is to bring them in, first come, first served.

To my knowledge, that is exactly the intent.

Mr. EMERY. What action would you expect the union to take if, in fact, you determined that someone was granted full membership out of line, so to speak?

Captain JOHNSON. I would certainly like to know about it. If you have information to the contrary, of course, we want to know about it.

Mr. EMERY. Well, thank you very much, Captain Johnson.

Thank you, Mr. Chairman.

Mr. DOWNING. Mr. Zeferetti?

Mr. ZEFERETTI. Thank you, Mr. Chairman.

Captain Johnson, just in a general basis, knowing there is no job market, what do you think the incentive is, or do you have any thoughts on this, what the incentive for all these men going into the Academies, and now even women making application to go to the Academies—do you think it is just a question of getting an education, or does it go beyond that?

I am wondering, because as Congressmen, we all get applicants from all over. They are still applying for the schools. The schools still have full enrollments.

I am just curious, without a job market, what your thoughts are on this matter.

Captain JOHNSON. It is a pretty dismal prospect, unfortunately.

Mr. ZEFERETTI. Do you then feel that the incentive might just be education?

Captain JOHNSON. I do not really think I could answer that.

Mr. ZEFERETTI. What I am concerned with is what happens to these kids after they get through if, in fact, we lose them, and they go into other industry, then we talk about in the area of national defense, we have to call them back.

Then we get concerned as to what Mr. Leeper said earlier, where you are dealing with people, possibly human error, possibly could cause problems, or whatever, and that is the area that I am concerned with.

I would like to get some thoughts on that, if you have any at all.

Captain JOHNSON. Unfortunately, as I say, it is totally keyed to the number of vessels that are operating under American flag that give these young men an opportunity to go to sea.

Mr. ZEFERETTI. Do you know what happens to these young men when they get out of the academy?

Do you keep track of them in any way?

Do you have any knowledge where they are?

Captain JOHNSON. Just since our rolls have been closed, we have something like 350 applicants that were interested in coming down. I think the figure is considerably reduced because there seemingly was no opportunity for them to come into the union, and guys would just drop out, go to school, or try to find work in other areas.

After all, it is pretty discouraging to wait month after month, and not be able to get a job, and he has to look elsewhere.

That is the problem, and our union is facing it, and until there are more opportunities, more ships, more cargo carried under American flag, the guy is in trouble.

Mr. ZEFERETTI. You also stated that you would advocate some kind of mandatory retirement age.

Captain JOHNSON. Personally, I would like to see a retirement age.

Mr. ZEFERETTI. And you mention the average age in your organization is 52 or 53. Does that include also the Masters Union?

Captain JOHNSON. Yes, sir, that is the total membership, right.

Mr. ZEFERETTI. Thank you, Mr. Chairman.

Mr. DOWNING. Mr. McCloskey has a question he would like to ask you, Captain.

Mr. McCLOSKEY. Captain, I want to hand down to you a copy of a letter that was sent to me, addressed to Capt. Frank Scavo, who is your international president, from Paul Wilkins of the Master Mates and Pilots, and I will read it to you, because I would like you to respond to it in view of your answers to Mr. Emery.

It reads:

DEAR FRANK: In reference to our conversation pledging full membership to certain persons who have been helpful to us, I am submitting the application of George W. Cline, for your consideration.

At present he is only able to pick up part-time jobs as stevedore superintendent, and would like to ship out until we are ready to resume our future plans.

I would recommend we make him a full member in view of his past and future services.

Fraternally,

PAUL WILKINS, Jr., *Port Agent—Houston.*

I gather this individual was accepted as a member of the union. Can you enlighten us on past and future services, and a policy apparently discussed to permit people that have rendered those services to get preference in joining the union?

Captain JOHNSON. Well, first let me say I am not familiar with the letter. I usually see most correspondence that comes in.

I am not familiar with this letter from Mr. Wilkins, and if I could just take a moment to read this.

May I?

Mr. McCLOSKEY. Surely. I can understand why such a policy might exist. I think we all try to look out for our friends.

Captain JOHNSON. Let me say, Mr. Chairman, I am totally unaware of this letter. I read in it what perhaps you are reading in it.

I would like to respond to this. I would like to check it out. I would like to see what did happen.

Mr. McCLOSKEY. Captain Johnson, I do not mean to be unfair to you in the question, either.

I would ask, Mr. Chairman, unanimous consent that these three pages be inserted in the record at this point, and the record be kept open for 10 days.

I might say, Captain, it would be helpful if both the sender of the letter and its recipient responded with a full statement of explanation as to how this man happened to be admitted to the union at a time when the rolls were closed, as I understand from your testimony, to graduates of the academies.

Mr. DOWNING. Without objection the material will be made a part of the record at this point.

[The document referred to follows:]

INTERNATIONAL ORGANIZATION OF MASTERS, MATES AND PILOTS.

Houston, Tex., October 30, 1975.

Captain FRANK SCAVO,

International President, International Organization Masters, Mates and Pilots, Offshore Division, 39 Broadway, New York, N.Y.

DEAR FRANK: In reference to our conversation pledging full membership to certain persons who have been helpful to us, I am submitting the application of George W. Cline, for your consideration.

At present he is only able to pick up part-time jobs as Stevedore Superintendent, and would like to ship out until we are ready to resume our future plans.

I would recommend we make him a full member in view of his past and future services.

Fraternally,

PAUL WILKINS, Jr.,
Port Agent—Houston.



APPLICATION TO THE
INTERNATIONAL ORGANIZATION OF MASTERS, MATES AND PILOTS
OFFSHORE DIVISION

Pilot Name Cline George W. Social Security No. 152-22-7802
(LAST) (FIRST) (MIDDLE INITIAL)

Address 1430 Vally Spring Houston Texas 77013 (713) 107-2110
(STREET) (CITY) (STATE) (ZIP CODE) (PHONE)

Licensed Deck Mate March 25, 1975 2,247.1 35,301.7
(RANK) (DATE) (GROSS TONNAGE) (NET TONNAGE)

Birth Date 9 8 1924 U.S. Citizenship ☒ Yes ☐ No
(MONTH) (DAY) (YEAR)

Marital Status ☒ Married Wife: 6 Daughter: 1 ☐ Single
(NO. OF WIVES) (NO. OF DAUGHTERS)

Education: (Circle highest level attained) Trade School High School College
Degree(s) 1 2 3 4 5 6 7 (9) 9 10 11 12 13 14 15 16

Maritime School Attended (if any) Alexandria Year Graduated 1950

☐ Check if you were, or are now, a member of any Local or Division of the Organization Local #3, Mobile 1955-1956
(LOCAL OR DIVISION) (PLANS)

☐ Check if you were, or are now, a member of any other Maritime Union S. U. P. Union

Prior Licensed Employment _____
COMPANY(IES) AND DATES

Name of Next of Kin (Beneficiary) Glenn B. Cline (Wife)

Address of Next of Kin 1430 Vally Spring Houston Texas 77013 (713) 107-2110
(STREET) (CITY) (STATE) (ZIP CODE) (PHONE)

If accepted as an IOMMP applicant, I hereby obligate myself to obey and be governed by the International Constitution and the Laws of any of its subordinate bodies with which I affiliate myself.

I agree to make necessary service fee payments and acknowledge that if I fail to meet my financial obligations to the Division or violate its rules or contracts, I may lose my status as an applicant and be prohibited from gaining membership.

I further understand that I will not be considered for membership in the Offshore Division until there is a vacancy as evidenced by the membership roster.

DATE JUNE 11 1975 SIGNATURE George W. Cline

WARNING: The presentation of false or misleading information on this application may be cause for denial.

MEMBERSHIP, VACATION AND RETIREMENT VACATION PLANS

APPLICANT'S ASSIGNMENT AND AUTHORIZATION

NAME: James Johnson SS#: 100-55-2001
(Please Print)ADDRESS: 11430 Valley Springs, Houston Texas 77043James Johnson
(Please Print)

I hereby assign to the IOMM & P Offshore Division, and you are hereby authorized and directed to deduct from each vacation payment due me, a service fee of \$75.00 per quarter or such other amount as may hereafter be agreed upon, plus 6% of the gross amount of all such vacation payments for work performed on Union contract vessels on or after June 16, 1972. The amount so deducted shall be paid directly to the Union. This assignment and authorization shall be irrevocable for the term of the Collective Bargaining Agreement between the Companies of the IOMM & P Offshore Division, and shall be automatically renewed, and shall be irrevocable for successive periods of each succeeding Collective Bargaining Agreement between the Companies and the IOMM & P Offshore Division, unless written notice is given by me to the Administrator of the MM & P Vacation and MM & P Tanker Vacation Plans and the IOMM & P Offshore Division not more than ten (10) days prior to the expiration of each successive Collective Bargaining Agreement.

Signature of Applicant: James Johnson Date: June 11, 1975Date of Registration: 6-6-75 Port of Registration: James Johnson
Union Official

PORT OFFICE COPY

Form 154

Captain JOHNSON. Mr. Chairman, is it possible for a little longer time frame?

Mr. SARBANES. I take it that the unanimous consent request encompassed that the response appear in the record adjacent to, or im-

mediately subsequent to the insertion that the gentleman is making, for purposes of laying out the full report

Mr. McCloskey. That is what I intended, that the record would be completed at this point with the exhibit entered, and the response of Captain Johnson, and hopefully, both the statement of the recipient and the sender of the letter, because it does materially bear on this question of whether or not there is discriminatory practices, and this would be of considerable interest, I think.

Mr. Downing. Without objection that shall be done.

Captain, did you want to say something else?

Captain Johnson. We have no objection. Can you give us a little more time, say 30 days? You are getting into the holidays right now.

Mr. Downing. Any objection?

The record will remain open for 30 days for that purpose, Captain.

Captain Johnson. Obviously, we will try it faster, but in the event we are not able to get the letters back and forth from these parties, we would like to have the additional time.

Mr. McCloskey. Thank you, Mr. Chairman.

Mr. Downing. Well, Captain, thank you very much. Before you leave, did you identify your colleague?

Captain Johnson. Yes, Mr. James Carr.

Mr. Chairman, may we have this copy of the letter?

Mr. Downing. The witness can have the copy.

Our next and final witness is someone very familiar to this committee, Mr. Jesse M. Calhoon, national president, Marine Engineers Beneficial Association.

Mr. Calhoon, it is a privilege to have you before the committee and if you will identify your colleague, you may proceed as you wish.

STATEMENT OF JESSE M. CALHOON, NATIONAL PRESIDENT, MARINE ENGINEERS BENEFICIAL ASSOCIATION, ACCOMPANIED BY HOWARD MARLOW

Mr. Calhoon. Mr. Chairman, with me is Howard Marlowe who did some of the research on this testimony I am about to give.

If you will bear with me, Mr. Chairman, because we were rushed on our testimony, I have some procedural things I would like to take care of before I get into my full testimony.

Before I begin my statement I would like to request that an attachment to my statement, labeled as attachment A, and entitled "Interim Report of Employment of Graduates, U.S. Merchant Marine Academy, State Marine Schools, Graduates 1951-1960 Inclusive," be printed in the hearing record.

Mr. Downing. Without objection, that will be done.

[The document referred to follows:]

ATTACHMENT A

U.S. DEPARTMENT OF COMMERCE, MARITIME ADMINISTRATION, INTERIM REPORT OF EMPLOYMENT OF GRADUATES, U.S. MERCHANT MARINE SCHOOLS, GRADUATES 1951-60, INCLUSIVE

INTERIM REPORT ON EMPLOYMENT OF GRADUATES—U.S. MERCHANT MARINE ACADEMY, STATE MARINE SCHOOLS, GRADUATES 1951-60, INCLUSIVE

[Questionnaire returns as of Jan. 23, 1962]

	Class of 1951				Class of 1952				Class of 1953				Class of 1954				Class of 1955				Class of 1956				Class of 1957				Class of 1958				Class of 1959				Class of 1960				Totals, 10 year			
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent								
Replies to questionnaire.....	206	39.6	262	55.6	308	52.0	243	57.3	248	59.8	342	78.0	359	77.2	250	65.4	321	70.1	352	76.4	2,891	62.73																						
Unknown—No reply.....	296	60.4	209	44.4	284	48.0	181	42.7	157	40.2	97	22.0	106	22.8	132	34.6	137	29.9	109	23.6	1,718	37.27																						
Total graduates.....	502	100.0	471	100.0	592	100.0	424	100.0	415	100.0	439	100.0	465	100.0	382	100.0	458	100.0	461	100.0	4,609	100.00																						
Employment status of graduates reporting:																																												
1. Merchant Marine (afloat).....	15	7.3	20	7.6	34	11.0	29	11.9	26	10.5	61	17.8	103	28.7	64	25.6	130	40.5	205	58.2	687	23.76																						
2. Active duty—Military.....	27	13.1	19	7.3	41	13.3	41	16.3	44	17.7	69	20.2	49	13.7	72	28.8	115	35.8	76	21.6	553	19.10																						
3. Merchant Marine (ashore).....	40	19.4	21	15.6	42	13.7	34	14.0	37	14.9	64	18.7	60	16.7	34	13.6	14	4.4	22	6.3	388	13.42																						
Subtotal.....	82	39.8	80	30.5	117	38.0	104	42.8	107	43.1	194	56.7	212	59.1	170	68.0	259	80.7	303	86.1	1,628	56.31																						
4. Advanced education.....	2	.9	6	2.3	14	4.5	12	4.9	6	2.5	15	4.4	22	6.1	8	3.2	7	2.2	3	.8	95	3.29																						
5. (a) Nonmaritime.....	76	36.9	93	35.5	111	36.0	74	30.5	71	28.6	75	21.9	78	21.7	39	15.6	36	11.2	32	9.1	685	23.69																						
(b) Scientific or defense.....	46	22.4	83	31.7	66	21.5	53	21.8	64	25.8	58	17.0	47	13.1	33	13.2	19	5.9	14	4.0	483	16.71																						
Subtotal.....	124	60.2	182	69.5	131	62.0	139	57.2	141	56.9	148	43.3	147	40.9	80	32.0	62	19.3	49	13.9	1,263	43.69																						
Grand total.....	206	100.0	262	100.0	308	100.0	243	100.0	248	100.0	342	100.0	359	100.0	250	100.0	321	100.0	352	100.0	2,891	100.00																						
6. Number years at sea (Merchant Marine):																																												
(a) None.....	36	17.5	67	25.6	96	31.2	126	51.9	108	43.6	158	46.2	112	31.2	112	44.8	126	39.2	112	31.8	1,053	36.42																						
(b) 1 yr or less.....	26	12.6	42	16.0	54	17.5	24	9.9	42	16.9	73	21.3	54	15.0	39	15.6	70	21.8	157	44.6	581	20.10																						
(c) 1 to 2 yr.....	36	17.5	34	13.0	33	10.7	26	10.7	37	14.9	41	12.0	69	19.2	39	15.6	92	28.7	83	23.6	490	16.95																						
(d) 2 to 3 yr.....	40	19.4	34	13.0	53	17.2	25	10.3	23	9.3	34	9.9	43	12.0	49	19.6	33	10.3	0	0	334	11.55																						
(e) 3 to 4 yr.....	30	14.6	21	8.0	19	6.2	17	7.0	20	2.0	16	4.7	66	18.4	11	4.4	0	0	0	0	200	6.92																						
(f) 4 to 5 yr.....	9	4.3	10	3.8	17	5.5	11	4.5	6	2.5	18	5.3	15	4.2	0	0	0	0	0	0	86	2.98																						
(g) Over 5 yr.....	29	14.1	54	20.6	36	11.7	14	5.7	12	4.8	2	.6	0	0	0	0	0	0	0	0	147	5.08																						
Total.....	206	100.0	262	100.0	308	100.0	243	100.0	248	100.0	342	100.0	359	100.0	250	100.0	321	100.0	352	100.0	2,891	100.00																						

INTERIM REPORT ON EMPLOYMENT OF GRADUATES—U.S. MERCHANT MARINE ACADEMY, STATE MARINE SCHOOLS, GRADUATES 1951-50, INCLUSIVE—Continued
[Questionnaire returns as of Jan. 23, 1962]

Class of 1951 Class of 1952 Class of 1953 Class of 1954 Class of 1955 Class of 1956 Class of 1957 Class of 1958 Class of 1959 Class of 1960 Totals, 10 year												
Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber
7. Number years: Active duty—Military:												
(a) None.....	65	31.6	50	19.1	50	16.2	48	19.8	66	26.6	120	35.1
(b) 1 yr or less.....	49	23.8	58	22.1	71	23.1	50	20.6	49	19.8	60	17.5
(c) 2 to 3 yr.....	54	26.2	117	44.7	123	39.9	80	32.9	69	27.0	74	21.6
(d) 4 to 5 yr.....	8	3.9	16	6.1	9	2.9	11	4.5	23	9.3	31	9.1
(e) 6 to 7 yr.....	1	0.5	1	0.4	3	1.0	7	2.9	9	3.6	48	14.0
(f) Over 5 yr.....	27	13.1	20	7.6	47	15.3	45	18.5	29	11.7	6	1.8
Total.....	206	100.0	262	100.0	308	100.0	243	100.0	249	100.0	342	100.0
8. Active or Reserve Commission:												
(a) Yes.....	182	83.3	248	93.9	223	93.5	207	85.2	235	94.8	316	92.4
(b) No.....	24	11.7	16	6.1	20	6.5	36	14.8	13	5.2	26	7.6
Total.....	206	100.0	262	100.0	308	100.0	243	100.0	249	100.0	342	100.0
U.S. MERCHANT MARINE ACADEMY												
Replies to questionnaire.....	89	29.1	107	47.5	122	45.0	71	46.5	77	47.2	118	71.1
Unknown—No reply.....	217	70.9	118	52.5	149	55.0	88	53.5	86	52.8	47	28.9
Total graduates.....	306	100.0	225	100.0	271	100.0	159	100.0	163	100.0	165	100.0
Employment status of graduates reporting:												
1. Merchant Marine (afloat).....	6	6.8	7	6.5	8	6.6	6	8.5	5	6.5	18	15.2
2. Active duty—Military.....	9	10.1	5	4.7	14	11.5	8	11.2	16	20.8	12	10.2
3. Merchant Marine (ashore).....	22	24.7	10	9.4	16	13.1	15	21.1	11	14.3	27	22.9
Subtotal.....	37	41.6	22	20.6	38	31.2	29	40.8	32	41.6	57	48.3
4. Advanced education.....	0	0	0	0	5	4.1	5	7.0	1	1.2	5	4.2
5. (a) Nonmilitary.....	32	35.9	39	36.4	47	38.5	17	24.0	22	28.6	33	19.5
(b) Scientific or defense.....	20	22.5	46	43.0	32	26.2	20	28.2	22	28.6	33	23.9
Subtotal.....	52	58.4	85	79.4	84	68.8	42	59.2	45	58.4	61	51.7
Grant total.....	89	100.0	107	100.0	122	100.0	71	100.0	77	100.0	118	100.0
Total.....	206	100.0	262	100.0	308	100.0	243	100.0	249	100.0	342	100.0

6. Number years at sea (Merchant Marine):

(a) More.....	9	10.1	26	24.3	50	41.0	38	53.5	19	37.6	33	28.0	32	19.2	27	33.3	61	46.9	16	19.3	321	30.78
(b) 1 yr or less.....	16	18.0	27	25.2	17	14.0	5	7.0	12	15.6	39	33.0	32	19.3	11	13.6	38	29.2	57	68.7	254	24.35
(c) 1 to 2 yr.....	17	19.1	13	12.2	12	9.8	5	7.0	12	15.6	22	18.5	40	24.2	19	23.4	30	23.1	10	12.0	180	17.26
(d) 2 to 3 yr.....	14	15.7	14	13.1	19	16.5	10	14.1	9	11.7	13	11.2	25	15.5	17	21.0	1	0.8	0	0	122	11.70
(e) 3 to 4 yr.....	12	13.5	4	3.7	8	6.6	5	7.0	10	13.0	6	5.1	28	16.9	7	8.7	0	0	0	0	80	7.67
(f) 4 to 5 yr.....	4	4.5	3	2.8	4	3.1	4	5.7	2	2.6	5	4.2	8	4.8	0	0	0	0	0	0	30	2.78
(g) Over 5 yr.....	17	19.1	20	18.7	12	9.8	4	5.7	3	3.9	0	0	0	0	0	0	0	0	0	0	56	5.37
Total.....	89	100.0	107	100.0	122	100.0	71	100.0	77	100.0	118	100.0	165	100.0	81	100.0	130	100.0	83	100.0	1,043	100.00

7. Number years: Active duty—Military: 1

(a) None.....	29	32.6	16	14.9	20	16.4	13	18.3	18	23.4	47	48.3	33	20.0	50	61.7	7	5.4	67	80.7	310	29.72
(b) 1 yr or less.....	2	2.2	0	0	1	1.6	16	21.5	16	20.8	17	14.4	6	3.7	99	60.0	4	4.9	101	77.7	15	18.1
(c) 1 to 2 yr.....	25	28.1	31	29.0	34	27.9	16	20.8	20	26.0	36	25.4	13	7.9	11	13.6	17	13.1	1	1.2	173	16.68
(d) 2 to 3 yr.....	18	20.2	47	43.9	47	38.5	23	32.4	20	26.0	7	5.9	10	6.1	1	1.3	0	0	0	0	218	21.90
(e) 3 to 4 yr.....	6	6.8	8	7.5	1	0.8	2	2.8	10	13.0	7	5.9	4	2.3	0	0	0	0	0	0	47	4.51
(f) 4 to 5 yr.....	0	0	0	0	0	0	0	0	1	1.2	5	4.2	4	2.3	0	0	0	0	0	0	12	1.15
(g) Over 5 yr.....	9	10.1	5	4.7	18	14.8	11	15.5	9	11.7	1	0	0	0	0	0	0	0	0	0	53	5.08
Total.....	89	100.0	107	100.0	122	100.0	71	100.0	77	100.0	118	100.0	165	100.0	81	100.0	130	100.0	83	100.0	1,043	100.00

8. Active or Reserve commission:

(a) Yes.....	81	91.0	103	96.3	117	95.9	59	83	75	97.4	115	97.5	158	95.8	73	90.1	127	97.7	80	96.4	968	94.73
(b) No.....	8	9.0	4	3.7	5	4.1	12	16.9	2	2.6	3	2.5	7	4.2	8	9.9	3	2.3	3	3.6	55	5.27
Total.....	89	100.0	107	100.0	122	100.0	71	100.0	77	100.0	118	100.0	165	100.0	81	100.0	130	100.0	83	100.0	1,043	100.00

CALIFORNIA MARITIME ACADEMY

Replies to questionnaire.....
Unknown—No reply.....

Total graduates.....

Employment status of graduates reporting:

1. Merchant Marine (afloat).....	1	7.7	3	16.6	5	15.6	5	18.5	4	19.1	10	33.4	8	40.0	4	17.4	18	51.4	27	55.1	85	31.72
2. Active duty—Military 1.....	0	0	1	5.6	5	15.6	6	22.2	5	23.8	13	43.6	2	10.0	12	52.2	8	22.9	14	28.5	66	24.62
3. Merchant Marine (ashore).....	3	23.1	2	11.1	3	9.4	0	0	2	9.5	2	6.6	3	15.0	2	8.7	0	0	1	2.1	18	6.71

Subtotal.....

4. Advanced education.....	4	30.9	5	33.3	13	40.6	11	40.7	11	52.4	25	83.4	13	65.0	18	78.3	25	74.3	42	85.7	169	63.05
5. (a) Nonmilitary.....	0	0	1	5.6	2	6.2	2	7.4	2	9.5	0	0	1	5.0	0	0	1	2.9	0	0	9	3.36
(b) Scientific or defense.....	4	30.8	6	33.3	14	43.8	11	40.8	3	10.0	2	8.7	4	11.4	5	10.2	5	10.2	5	10.2	58	21.65
(b) Scientific or defense.....	5	38.4	5	27.8	3	9.4	3	11.1	1	4.8	2	6.6	4	20.0	3	13.0	4	11.4	2	4.1	32	11.94

Subtotal.....

9	69.2	12	66.7	19	59.4	16	59.3	10	47.5	5	16.6	7	35.0	5	21.7	9	25.7	7	14.3	99	36.95	

SUB total.....	13	100.0	18	100.0	32	100.0	27	100.0	21	100.0	30	100.0	20	100.0	23	100.0	35	100.0	49	100.0	268	100.00

Grand total.....	13	100.0	18	100.0	32	100.0	27	100.0	21	100.0	30	100.0	20	100.0	23	100.0	35	100.0	49	100.0	268	100.00

[Questionnaire returns as of Jan. 23, 1962]



Employment status of graduates reporting:

1. Merchant Marine (allot)	1	3.4	5	16.1	8	17.0	3	7.5	12	29.3	18	25.4	22	46.8	14	40.0	26	60.5	43	63.3	152	34.00
2. Active duty—Military	8	27.7	5	16.1	5	10.6	7	17.5	11	26.8	16	22.5	8	17.0	14	40.0	8	18.6	13	20.6	95	21.25
3. Merchant Marine (casualty)	4	13.8	3	9.7	5	19.2	2	5.0	2	4.9	17	23.9	4	8.5	2	5.7	1	2.3	3	4.8	47	10.52

Subtotal

13	44.9	13	41.9	22	46.8	12	30.0	25	61.0	51	71.8	34	72.3	30	85.7	35	81.4	59	93.7	294	65.77
----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	-----	-------

4. Advanced education

1	3.4	1	3.3	6	12.8	1	2.5	2	4.9	4	5.7	3	6.4	1	2.9	1	2.3	1	1.5	21	4.69
---	-----	---	-----	---	------	---	-----	---	-----	---	-----	---	-----	---	-----	---	-----	---	-----	----	------

5. (a) Nonmarine

13	44.8	12	38.7	16	34.0	20	50.0	10	24.4	14	19.7	7	14.9	4	11.4	7	16.3	3	4.8	106	23.72
----	------	----	------	----	------	----	------	----	------	----	------	---	------	---	------	---	------	---	-----	-----	-------

(b) Scientific or defense

2	6.9	5	16.1	3	6.4	7	17.5	4	9.7	2	2.8	3	6.4	0	0	0	0	0	0	26	5.82
---	-----	---	------	---	-----	---	------	---	-----	---	-----	---	-----	---	---	---	---	---	---	----	------

Subtotal

16	55.1	18	58.1	25	53.2	28	70.0	16	39.0	20	28.2	13	27.7	5	14.3	8	18.6	4	6.3	153	34.23
----	------	----	------	----	------	----	------	----	------	----	------	----	------	---	------	---	------	---	-----	-----	-------

Grand total

29	100.0	31	100.0	47	100.0	40	100.0	41	100.0	71	100.0	47	100.0	35	100.0	43	100.0	63	100.0	447	100.00
----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	-----	--------

6. Number years at sea:

5	17.2	2	6.5	1	2.1	13	32.5	8	19.5	27	38.1	9	19.2	14	40.0	6	14.0	15	23.8	100	22.37
---	------	---	-----	---	-----	----	------	---	------	----	------	---	------	----	------	---	------	----	------	-----	-------

(a) None

6	16.9	2	6.5	9	19.2	7	17.5	9	22.0	9	12.7	5	10.6	3	8.6	7	16.3	23	36.5	78	17.00
---	------	---	-----	---	------	---	------	---	------	---	------	---	------	---	-----	---	------	----	------	----	-------

(b) 1 yr or less

7	24.2	3	9.7	9	19.2	9	22.5	6	14.7	11	15.5	8	17.0	5	14.3	17	39.5	25	39.7	100	22.37
---	------	---	-----	---	------	---	------	---	------	----	------	---	------	---	------	----	------	----	------	-----	-------

(c) 1 to 2 yr

10	31.5	12	38.7	20	42.6	15	37.5	11	26.8	13	18.3	3	6.4	9	25.7	13	30.2	0	0	73	15.66
----	------	----	------	----	------	----	------	----	------	----	------	---	-----	---	------	----	------	---	---	----	-------

(d) 2 to 3 yr

5	17.2	3	9.7	6	12.8	4	10.0	4	9.7	5	7.0	19	40.4	4	11.4	0	0	0	0	50	11.19
---	------	---	-----	---	------	---	------	---	-----	---	-----	----	------	---	------	---	---	---	---	----	-------

(e) 3 to 4 yr

3	10.3	4	12.9	5	10.6	0	0	2	4.9	5	7.0	3	6.4	0	0	0	0	0	0	22	4.92
---	------	---	------	---	------	---	---	---	-----	---	-----	---	-----	---	---	---	---	---	---	----	------

(f) 4 to 5 yr

0	0	10	32.2	11	23.3	3	7.5	4	9.7	1	1.4	0	0	0	0	0	0	0	0	29	6.49
---	---	----	------	----	------	---	-----	---	-----	---	-----	---	---	---	---	---	---	---	---	----	------

(g) Over 5 yr

29	100.0	31	100.0	47	100.0	40	100.0	41	100.0	71	100.0	47	100.0	35	100.0	43	100.0	63	100.0	447	100.00
----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	-----	--------

7. Number years: Active duty—Military: 1

8	27.7	7	22.5	5	10.6	6	15.0	10	24.4	14	19.7	30	63.8	12	34.3	35	81.4	30	47.6	157	35.12
---	------	---	------	---	------	---	------	----	------	----	------	----	------	----	------	----	------	----	------	-----	-------

(a) None

3	10.3	3	9.7	10	21.3	8	20.0	6	14.7	20	28.2	6	12.7	2	5.7	6	14.0	0	0	35	7.83
---	------	---	-----	----	------	---	------	---	------	----	------	---	------	---	-----	---	------	---	---	----	------

(b) 1 yr or less

10	31.5	12	38.7	20	42.6	15	37.5	11	26.8	13	17.3	8	12.7	8	22.8	2	4.6	3	4.8	69	15.44
----	------	----	------	----	------	----	------	----	------	----	------	---	------	---	------	---	-----	---	-----	----	-------

(c) 1 to 2 yr

1	3.4	3	9.7	5	10.6	4	10.0	2	4.9	9	12.7	2	4.3	7	20.0	0	0	0	0	33	7.38
---	-----	---	-----	---	------	---	------	---	-----	---	------	---	-----	---	------	---	---	---	---	----	------

(d) 2 to 3 yr

1	3.4	3	9.7	1	2.1	0	0	2	4.9	11	15.5	1	2.2	0	0	0	0	0	0	16	3.58
---	-----	---	-----	---	-----	---	---	---	-----	----	------	---	-----	---	---	---	---	---	---	----	------

(e) 3 to 4 yr

6	20.7	6	19.4	6	12.8	7	17.5	9	22.0	3	4.2	0	0	0	0	0	0	0	0	37	8.28
---	------	---	------	---	------	---	------	---	------	---	-----	---	---	---	---	---	---	---	---	----	------

(f) 4 to 5 yr

19	100.0	31	100.0	47	100.0	40	100.0	41	100.0	71	100.0	47	100.0	35	100.0	43	100.0	63	100.0	447	100.00
----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	-----	--------

(g) Over 5 yr

24	82.8	31	100.0	43	90.8	40	100.0	41	100.0	67	94.3	42	89.4	31	88.5	35	81.4	53	84.1	407	91.05
----	------	----	-------	----	------	----	-------	----	-------	----	------	----	------	----	------	----	------	----	------	-----	-------

(a) Yes

5	17.2	0	0	4	9.2	0	0	0	0	4	5.7	5	10.6	4	11.4	8	18.6	10	15.9	40	8.95
---	------	---	---	---	-----	---	---	---	---	---	-----	---	------	---	------	---	------	----	------	----	------

(b) No

29	100.0	31	100.0	47	100.0	40	100.0	41	100.0	71	100.0	47	100.0	35	100.0	43	100.0	63	100.0	447	100.00
----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	-----	--------

Total

30	53.6	28	42.4	31	50.0	36	60.0	31	64.6	39	65.4	44	73.3	37	72.5	42	75.0	47	85.5	365	63.92
----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	-----	-------

Replies to questionnaire

26	46.4	38	57.6	31	50.0	24	40.0	17	35.4	18	31.6	16	26.7	14	27.5	14	25.0	8	14.5	206	36.08
----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	---	------	-----	-------

Unknown—No reply

56	100.0	66	100.0	62	100.0	60	100.0	48	100.0	57	100.0	60	100.0	51	100.0	56	100.0	55	100.0	571	100.00
----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	-----	--------

Total graduates

30	53.6	28	42.4	31	50.0	36	60.0	31	64.6	39	65.4	44	73.3	37	72.5	42	75.0	47	85.5	365	63.92
----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	-----	-------

Replies to questionnaire

26	46.4	38	57.6	31	50.0	24	40.0	17	35.4	18	31.6	16	26.7	14	27.5	14	25.0	8	14.5	206	36.08
----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	----	------	---	------	-----	-------

Unknown—No reply

56	100.0	66	100.0	62	100.0	60	100.0	48	100.0	57	100.0	60	100.0	51	100.0	56	100.0	55	100.0	571	100.00
----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	----	-------	-----	--------

Total graduates

[Questionnaire returns as of Jan. 23, 1962]

-----[P]-----

Questionnaire returns as of Jan. 23, 1962:

NEW YORK STATE
MARITIME COLLEGE—Continued

CONSOLIDATED REPORT OF GRADUATES BY YEARS--U.S. MERCHANT MARINE ACADEMY, STATE MARINE SCHOOLS, 1951-60, INCLUSIVE

Employment status of graduates reporting:

5. (a) Nonmaritime	74	36.8	85	34.4	103	36.7	73	30.8	69	28.5	73	22.0	75	21.5	34	14.5	36	11.8	32	9.7	659	23.76
(b) Scientific or defense	45	22.4	80	32.4	62	21.1	53	22.4	62	25.6	57	17.1	47	13.5	32	13.6	19	6.2	14	4.3	471	16.99
Subtotal	121	60.2	171	69.2	184	62.6	138	58.2	136	56.2	145	43.6	141	41.3	74	31.5	62	20.3	49	14.9	1,224	44.14
Grand total	201	100.0	247	100.0	294	100.0	237	100.0	242	100.0	333	100.0	349	100.0	235	100.0	306	100.0	329	100.0	2,773	100.00
6. Number years at sea (Merchant Marine):																						
(a) None	34	16.9	62	25.1	93	31.6	123	51.9	106	43.8	156	46.9	110	31.5	104	44.2	124	40.5	105	31.9	1,017	36.67
(b) 1 yr or less	26	12.9	42	17.0	50	17.0	24	10.1	40	16.5	71	21.3	53	15.2	38	16.2	69	22.6	151	45.9	564	20.34
(c) 1 to 2 yr	36	17.9	33	13.4	32	10.9	25	10.5	35	14.4	41	12.3	66	18.9	36	15.3	86	28.1	73	22.2	463	16.69
(d) 2 to 3 yr	38	18.9	32	13.0	50	17.0	24	10.1	23	9.5	33	9.9	39	11.2	46	19.6	27	8.8	0	0	312	11.26
(e) 3 to 4 yr	30	14.9	18	7.3	18	6.1	17	7.2	20	8.2	13	3.9	66	18.9	11	4.7	0	0	0	0	193	6.96
(f) 4 to 5 yr	9	4.5	9	3.6	17	5.8	11	4.7	6	2.7	17	5.1	15	4.3	0	0	0	0	0	0	84	3.03
(g) Over 5 yr	28	14.0	51	20.6	34	11.6	13	5.5	12	4.9	2	.6	0	0	0	0	0	0	0	0	140	5.05
Total	201	100.0	247	100.0	294	100.0	237	100.0	242	100.0	333	100.0	349	100.0	235	100.0	306	100.0	329	100.0	2,773	100.00
7. Number years: Active duty—Military:																						
(a) None	62	30.8	46	18.6	47	16.0	47	19.9	65	25.9	114	34.3	104	29.8	100	42.6	107	35.0	243	73.9	935	33.72
(b) 1 yr or less	2	1.0	0	0	5	1.7	2	.8	5	2.1	3	.9	104	29.8	19	8.1	114	38.3	74	22.5	328	11.83
(c) 1 to 2 yr	48	23.9	50	20.2	64	21.8	47	19.9	48	19.8	58	17.4	33	9.5	42	17.9	71	23.2	9	2.7	470	16.95
(d) 2 to 3 yr	54	26.9	116	47.0	123	41.8	79	33.3	66	27.3	73	21.9	65	18.6	60	25.5	14	4.5	3	.9	653	23.55
(e) 3 to 4 yr	8	4.0	16	6.5	18	6.1	11	4.7	22	9.1	31	9.3	37	10.6	14	5.9	0	0	9	0	147	5.30
(f) 4 to 5 yr	1	.5	1	.4	2	.7	7	2.9	8	3.3	48	14.4	6	1.7	0	0	0	0	0	0	74	2.63
(g) Over 5 yr	26	12.9	18	7.3	45	15.3	44	18.6	28	11.5	6	1.8	0	0	0	0	0	0	0	0	167	6.02
Total	201	100.0	247	100.0	294	100.0	237	100.0	242	100.0	333	100.0	349	100.0	235	100.0	306	100.0	329	100.0	2,773	100.00
8. Active or Reserve commission:																						
(a) Yes	179	89.1	233	94.3	275	93.5	202	85.2	229	94.6	307	92.2	313	89.7	194	82.6	271	88.6	262	79.6	2,465	88.89
(b) No	22	10.9	14	5.7	19	6.5	35	14.8	13	5.4	26	7.8	36	10.3	41	17.4	35	11.4	67	20.4	308	11.11
Total	201	100.0	247	100.0	294	100.0	237	100.0	242	100.0	333	100.0	349	100.0	235	100.0	306	100.0	329	100.0	2,773	100.00

1 Includes Army; Navy; Air Force; Coast Guard; Coast and Geodetic Survey as Commissioned Officers. Note: See attached explanation of certain aspects of this employment status survey of graduates of U.S. Merchant Marine Academy and the State Marine Schools.

U.S. COAST GUARD,
DEPARTMENT OF TRANSPORTATION,
Baltimore, Md., October 3, 1975.

Mr. ROY LUEBBE,
Director, Calhoun MEBA Engineering School,
Baltimore, Md.

DEAR MR. LUEBBE: On behalf of the Coast Guard, I want to express my appreciation for the opportunity to have one of my officers attend the LNG Course at your school.

When the Cove Point LNG facility begins operations in 1977, this office will be deeply involved in the inspection of the ships carrying this unique cargo. The practical as well as theoretical knowledge presented during the course will be of great value in training inspectors for this task.

Lt. Maloney tells me that he was favorably impressed with all aspects of your LNG course, and this favorable evaluation is being passed along to the Commandant of the Coast Guard.

I certainly am in favor of such exchange of professional information between the Coast Guard and the marine industry here in Baltimore. I appreciate your cooperation in making Lt. Maloney's period of instruction the success that it was.

Sincerely,

THOMAS W. POWERS,
Captain, USCG,
Officer in Charge, Marine Inspection.

Mr. CALHOON. Mr. Chairman, I appreciate the opportunity to appear before this subcommittee on behalf of the National Marine Engineers' Beneficial Association. The members of our labor union are the people who keep the U.S.-flag ships going. They are responsible for the propulsion engines, boilers, refrigeration, air-conditioning, sanitation systems, deck machinery, and electrical equipment.

Because of the high degree of skill required to perform the various tasks which fall within the responsibility of licensed engineers, MEBA has a vital interest in the maritime training legislation before this subcommittee. We want to assure the best training program possible. That is why we requested an opportunity to appear before you.

We are opposed to any increase in Federal assistance to the State and Federal maritime academies or to their students. Those schools are simply not doing the job. They have turned out an oversupply of officers, and they have failed to provide adequate training and proper motivation for their students.

We are already throwing money down the maritime academy drain. Providing them with more money will only heighten that folly.

Time has not permitted us to prepare an analysis of all the data which is available to us, nor do we have access to all of the data needed to respond to some of the rhetoric contained in recent testimony before this subcommittee. We think that many of the claims made by the academies and their supporters are little more than empty rhetoric, and I am here today to present you with the facts in support of MEBA's position.

Our position is based on the following points: (1) There is presently a large surplus of trained maritime officers. Increased academy funding will only encourage their expansion and worsen the already-dismal job picture; (2) the Maritime Administration's projection of an officer shortage within the next few years is grossly inaccurate; and (3) the Federal and State academies have not been providing their students with either a proper incentive or adequate training to pursue shipboard careers.

There is at the present time a serious oversupply of maritime officers. Since December 1, 1973, the number of billets for licensed shipboard officers has decreased by 17.6 percent. Over the past 5 years, the size of the U.S.-flag fleet has declined by almost 30 percent.

While this steep decline of job opportunities has taken place, the Federal and State academies have continued to turn out licensed officers at a pace which hardly seems to slow.

In 1964, there were more than 13,000 licensed shipboard jobs. In 1974, the figure was down almost 44 percent, to about 7,300 jobs. Yet, the academies actually graduated more officers in 1974 than they did in 1964.

American involvement in the Vietnam war began in earnest during 1963. Within 2 years, the academies had increased their graduate output by nearly 30 percent. By 1974, graduate output from the academies remained above that 1963 level.

As of October 1, 1975, the academies were training 3,287 students. As of that same date, there were only 6,484 licensed shipboard jobs.

I would like to stop at this point and point out that the academies are not training those 3,287 students for the 6,484 jobs. They are training 3,287 students for about 2,000 or 2,500 third assistant and third mate jobs, so they have been training now almost 2 students for every possible job they could go into in the American Merchant Marine.

Where will these 3,300 students find jobs when there is already a surplus of licensed officers? Where will they find jobs when the size of our fleet is declining? The answer is clear: most will not be going to sea aboard U.S.-flag ships.

In March of this year, the National Council of Maritime Academy Alumni Associations went on record as stating that there is already a sufficient number of trained professional mariners to satisfy the present and future needs of the merchant marine. And, they add, "As things stand now, there are enough licensed deck officers to meet all future needs of the industry for at least 10 years." That was before the U.S. Coast Guard.

In 1972, the Masters, Mates and Pilots Union had so much unemployment that they reached an agreement with industry which is still in force today.

That agreement provided that second and third mates could work on a job for a maximum of 6 months. Then they had to leave that job permanently so that other officers could take their place. Increased employment opportunities are one of the most important issues involved in the M.M. & P.'s current contract negotiations. Yet the Federal and State academies are presently training more than 1,300 new deck officers.

Mr. Chairman, this fact highlights one of the most important concerns MEBA has with the legislation before this subcommittee. This is the guts of our opposition to this bill.

High academy enrollments produce an oversupply of officers. An oversupply of officers creates higher unemployment. And higher unemployment inevitably leads to labor instability, which in turn leads to strikes.

We at MEBA are primarily concerned with promoting labor stability. When automation began to take hold in the 1960's, we planned ahead so that there would be the least possible unemployment for our

members. We succeeded in promoting employment and job security policies where other unions have failed. If the academies continue to grind out an oversupply of officers, our efforts to achieve labor stability will be undermined.

Let me point out at this point as I understand the record there is no support from any maritime union for any maritime employer for this bill.

The Maritime Administration came before this subcommittee last year with projections of officer shortages by the end of the decade. Those projections are inaccurate.

We wanted to do more technical work on their projections and we could prove their inaccuracies in their mere computations. We did not have the time.

Over the past 30 years, the size of the U.S. flag fleet has decreased by more than 76 percent. In the last 5 years alone, the decline has been nearly 30 percent. MARAD tell us that the decline will be reversed by the end of 1977 so that by 1985 the fleet size will have increased by more than 12 percent over 1974 levels. Based on this faulty assumption, MARAD goes on to predict an acute officer shortage by the end of this decade.

There are just too many question marks in the available data to make this kind of prediction. Ten years ago, MARAD predicted a growing need for licensed officers during the following decade. In 1970, a new MARAD study predicted an oversupply. Now, they are back once again predicting a shortage. That most recent study was actually off by more than 30 percent in its predictions of actual deck and engine billets for 1974 and 1975. MARAD's ability to predict future manpower requirements is clearly open to question.

In fact, of course, there is very little on which to base predictions for maritime manpower needs during the next 5 to 10 years.

What will be the state of the U.S. economy? How about world economic conditions? What will be the level of congressional maritime appropriations?

How soon will older ships be phased out? How many older ships will be converted? Will the developing nations of the world acquire fleets of their own?

Will a change in domestic tax laws or in the policies of the oil-producing nations mean a greater or lesser reliance on U.S.-flag ships? Will Congress pass new cargo preferences legislation? Will the share of oceanborne cargo carried aboard U.S.-flag ships increase or decrease? What about the share of cargo carried aboard ships as compared to airplanes?

My understanding is the OMB has taken out of the present budget all of the CDS construction money for the next year and eliminated the \$75 million carry forward that was left over from this year.

Mr. DOWNING. At that point, Mr. Calhoun, where did you get that information?

Mr. CALHOON. I got it from the wife of a high government official in the executive department.

Mr. DOWNING. There has been no public announcement of this as of this time.

Mr. CALHOON. Not that I have heard.

Mr. DOWNING. And they have eliminated all of the CDS and also the carryover of \$75 million?

Mr. CALHOON. Yes.

Mr. DOWNING. I suppose because there is no pending application for construction.

Mr. CALHOON. I do not know, sir.

Mr. DOWNING. Thank you. Go ahead.

Mr. CALHOON. And let us not forget about automation. Over the years, MEBA and the industry have cooperated in paving the way for automation. We know that the American fleet needs the best equipment available. But that does not negate the fact that automation means a loss of seagoing jobs.

Take the C-4 freighter, for example. We have 103 of them in our fleet today, and about 40 of those ships are more than 25 years old.

The replacement of the 40 C-4's with 10 C-8 Lash ships will save millions of dollars and improve our fleet's efficiency dramatically. But it will also cause a loss of more than 1,900 jobs. The degree and pace of automation will have a major impact on future manpower needs.

Mr. Chairman, each of these factors is crucial in projecting future manpower requirements. Each represents a large question mark. And each points to the unreality of the MARAD projections.

The original purpose behind the establishment of the Federal academy at Kings Point was the training of active officers. In the words of the Merchant Marine Act of 1936:

The Secretary of Commerce shall maintain a Merchant Marine Academy at Kings Point, New York, for the instruction and preparation for service in the merchant marine of selected persons as officers thereof.

As the Federal and State academies became 4-year accredited colleges, the emphasis was placed more and more on liberal arts courses at the expense of engineering and nautical science courses.

The State academies and—in particular—the Federal academy tend to attract students from middle-income backgrounds. The sea as a career has little attraction to these young people; it has not been attractive to middle-class young people for the past 100 years or more.

It is little wonder that a large percentage of academy graduates never go to sea. Not only is there no legal obligation for them to do so, but their instructors deprecate seagoing as a career and promote on-shore jobs as having more status.

At the academies, the emphasis is on military discipline with its snappy uniforms and well-polished shoes. Getting up to your elbows in grease and dirt does not fit in with this military-style image.

On the sea, if a piece of machinery malfunctions, the engineer must have the ability to rig up a system that will get the ship into port. That requires innovation, but innovation is rarely a product of a training course which teaches a student simply to follow orders.

Two of the reasons the academies state for asking for an increase in the Federal subsidy is to buy uniforms and because their students have to live in the academy, they cannot take part-time jobs.

Mr. Chairman, those two reasons can be met very easily. Take them out of uniform and let them go to work part time. We do it in our school, and we have no problem with it.

The seagoing training at several of the State academies is deficient. Of the six training ships used at these schools, one was built in 1940,

one in 1943, two in 1944, and two in 1952. Only the latter two are operating within the 25-year normal life expectancy of a ship.

When a ship passes its life expectancy, it loses its right to a subsidy. The assumption is made—quite reasonably—that ships that old pose too many safety hazards and are too inefficient to maintain in operation. Yet, two-thirds of the training vessels at the State academies are past that age.

What is more, all of these training ships were built before the great technological revolution of the 1960's. The trainees who sail aboard them have no opportunity to learn that new technology.

Mr. Chairman, I also submit to you that in the ad hoc committee's report there is a statement on the life expectancy of these ships.

Mr. Chairman, I suspect the academies increased the life expectancy on paper of these ships to keep from telling you at this time what the replacement cost would be and when the replacement costs for these ships are laid out before this committee, you will be shocked, to say the least.

The oldest ship was built in 1940 and they say she has a life expectancy of another 10 to 15 years.

Mr. Chairman, when Andy Gibson was Maritime Administrator 4 or 5 years ago, he told me he never had a restful night when those ships were at sea. He was so concerned over their deteriorated condition that he thought there was an imminent national scandal brewing if one of those ships ever got caught in a storm or hurricane and sunk at sea with all those young fellows aboard.

Let us look for a moment at the substance of shipboard training at the various schools.

Every graduate of the MEBA school has at least 365 days of practical experience aboard commercial vessels. For the State schools, the requirement is a minimum of 6 months training aboard each school's training vessel. For the Federal academy, students are required to have 10 months of shipboard experience.

The Coast Guard requires no proof of this 10 months. We have at least one instructor in our school who is a graduate of King's Point and who says he only had 4 months sea experience.

Southern Maine Vocational Technical Institute secured approval a year ago for a program which will allow their students to take the license examination prior to the last 4 months of their 1-year of seagoing training. A similar request by the Calhoun MEBA school had previously been denied by the Coast Guard.

One of the academies testified here that the students took their examination 10 or 11 months before they graduated.

Mr. Chairman, I say to you you should get the proof of nautical sciences and engineering taught in those 10 months. In my opinion, they dropped the 4-year maritime training down to a 3-year school by taking the examination a year early so they can concentrate on their liberal arts courses.

There is no sound reason for these inconsistent requirements.

The decision by the Gulf Oil Corporation to contract with the Southern Maine Vocational Technical Institute for the training of licensed deck officers through a three-year program points up the failure of the academies to meet the needs of our merchant marine. With

the Federal and State academies producing an oversupply of licensed seamen already, it is obvious that Gulf felt that academy graduates were not sufficiently trained and/or not sufficiently motivated to meet that company's maritime needs.

Gulf Oil has no union contract for its officers. I have heard the oil companies accused of many things in the last few years, but throwing their money away is not one of them.

Representatives of at least four State academies and three academy alumni associations went on record with formal objections to this new industry training program. Their primary objection was the oversupply of deck officers which the academies themselves had already caused.

Mr. Chairman, the examination results for academy students are a disgrace. At any other institution—and I mean by that private institutions—they would have caused major changes in the faculty, curriculum or methods of instruction. But at the academies, bureaucracy has resisted making the needed changes. Instead, the academies have come before this subcommittee asking a monetary reward for their failure. Give them more time, they say, and the exam results will improve.

The facts are more revealing than their rhetoric. Of the academy graduates who took engine license examinations in 1974, less than 49 percent passed, compared to a 70 percent pass rate during that same year for graduates of the Calhoun MEBA engineering school. For those who had previously failed all or part of their examinations, the engine reexam pass rate was 45.6 percent for graduates of the Federal and State academies to 85.7 percent for graduates of the MEBA school.

Let me point out at this time that these are inconsistent figures because they testified on the reexamination they went back to the old, archaic essay examination and did not reexamine on the new examination.

We insisted that every student in our school could not get a license unless he got it in the new examination.

Mr. DOWNING. Does the MEBA graduate take the same examination as the academy graduates?

Mr. CALHOON. Yes. They are made up in Oklahoma, mailed to the local inspector, who has no say so over them, are given in every local inspection office in the United States that 1 day a month, are mailed back to Oklahoma and graded in Oklahoma and the results are mailed to the local inspection officer.

We are opposed to that, but that is the procedure.

There has been some discussion before this subcommittee of the employment of graduates of the Federal and State academies. A MARAD survey on this subject covering 1951 through 1960 showed that just over 23 percent of academy graduates went into active service on board merchant marine ships.

That same survey showed just over 5 percent of those graduates who did go to sea in the merchant marine stayed in that career for more than 5 years.

MEBA is also aware of a current Coast Guard report which shows that more than 83 percent of the officers in the merchant marine come from nonmaritime academy sources.

The bulk of these non-academy-trained officers came through the lawsepipe—a source which has been repeatedly ignored by the academies and by the Maritime Administration.

An examination of MEBA's list of active members shows that 1,014, or about 12 percent, of our current members are graduates of the Federal and State academies.

Of these people 156 were graduated from the California, Maine, Massachusetts, New York, and Kings Point academies during World War II, compared to 491 graduates of just two special maritime service training schools operated by the Maritime Commission during the same period, who are still active members of MEBA.

Mr. Chairman, I think these paragraphs go to the gut of the issue before this subcommittee.

Do they go to sea?

A Department of Commerce study in the mid-1950's said they did not go to sea. That study got no action and really was suppressed and deprecated.

The Coast Guard has a current study that shows they do not go to sea. We have done a computer run of the membership of this organization that shows who are academy graduates and who are not.

Each one of these studies support the other; that they do not go to sea.

In a survey of MEBA members and applicants who were graduates of the academies during 1965 and 1968, we discovered both a clear inclination away from seagoing as a career and the failure of the academies to meet a national emergency.

Between 1966 and 1968, while the Vietnam war was raging, the days worked by the graduates actually declined by a startling 44 percent. And both groups of graduates showed a steady decline in days worked for each and every year following graduation.

Mr. Chairman, I think at this point, we should turn to table 7a. I had been fishing around in my head for a word to meet this occasion. I believe I can say this is damned unloyal to his country and what I would like to say is it borders on treason for this Government to train people, pay for their education yet in the case of a national emergency when we have 550,000 troops in Vietnam and they will not go to sea. If they go they say they will go 1 or 2 years and leave. They do this while this kind of emergency is going on.

Mr. Chairman, I have heard lots of discussion about less of a setup than this. This proves the ineffectiveness of a list of trained officers.

In the graduating class of 1965 we have to discount the first figure, because they graduated about mid-year, but that class sailed 15,947 man-days in 1966, and by 1967 they were down to 11,120 man-days when we could not sail the ships to move the guns and ammunition and bombs to our troops in Vietnam. The figures show similar results for the class of 1968.

Mr. Chairman, we would have liked to have developed these figures much more extensively and showed what happened to graduates in the early 1960's when the Vietnam war came; but we did not have the opportunity, Mr. Chairman.

What these facts indicate is that a large proportion of Maritime Academy graduates never go to sea in the merchant marine; and, of those who do, most do not make seagoing a career.

Why pour taxpayers' money into academies which are failing in their responsibility to train active officers for service in the merchant marine? We hope that this subcommittee will pursue the question of the employment status of academy graduates with a view to determining just how many active officers they have produced and how many of these active officers have made seagoing a career. That is a crucial question in determining the need for, and the effectiveness of, each of the academies.

Mr. Chairman, I question very seriously the figures supplied to the ad hoc committee on page 11, the self-serving documents of the academy.

Mr. Chairman, the relationship between the maritime academies and industry is almost nonexistent. An even stronger case can be made that the academies have shown little interest in cooperating with the unions.

In the mid-1960's, the Kings Point academy rejected a MEBA/industry proposal to provide private funds to pay the full cost of a program to retrain seagoing engineers for newly-built, government-subsidized, automated ships. A similar effort at about the same time to establish a training program at the New York State Maritime College at Fort Schuyler was also rejected.

That school's president, Adm. A. C. Moore—and they all seem to have an admiral as president—was quoted as saying that it would be “improper” to have the students enrolled in his college “mingle” with the maritime engineers.

At Kings Point we were told by the admiral that his institution could not be contaminated by union money. This was conveyed to us by the dean of engineering of Columbia University, who was with Enrico Fermi when he split the atom and he was completely disgusted.

These rejections came despite the fact that there is no upgrading program presently in force at any of the academies. At one time, Kings Point had an upgrading program. But, even though there were adequate berthing facilities at the academy, the private trainees had to be bused to the academy every day.

At least the maritime academies have been in support of busing over a long period of time.

Mr. BRAGG. Excuse me, Mr. Calhoun. Do you offer that as an accommodation?

Mr. CALHOON. I am in favor of busing to improve education or anything else to improve education.

Mr. BRAGG. Thank you.

Mr. CALHOON. In terms of their relationship with MEBA, we can only conclude that the academies have shown an unwillingness to cooperate. As recently as Admiral Kinney's appearance before this subcommittee on December 3, their attitude has reflected a clear anti-union bias which has served only to weaken our merchant marine.

The maritime academies must not be permitted to operate in a vacuum, constantly expanding their student body far beyond the needs of our merchant marine while at the same time providing an inadequate education.

Their appeals to Congress have been geared toward increasing the degree of Federal support so they can expand their student body. Yet, there has been ample evidence in hearings before the ad hoc committee

on maritime education and training in 1974 that the quality of their students has been diminishing. Other colleges may need to lower their student standards in order to maintain tuition income, but there is clearly no need for any of the maritime academies to lower their standards so they can attract excessive numbers of students for non-existent jobs.

Mr. Chairman, I would say at this point a careful reading of the testimony will indicate that practically all of the maritime academies plan to increase their enrollments even though they did not say it in those clear words. It is clearly in the testimony of most of them.

Mention must also be made of the inflexibility of the academy training programs. By 1980, predictions have been made that 4-billion cubic feet per day of liquid natural gas will be coming into this country by tanker.

In a little more than a year from now, at least one-fourth of that level will be coming into Maryland from Algeria. None of the academies has yet to train a single graduate who is ready to work aboard the new LNG ships. At the MEBA school, we have already graduated 60 officers who have been given special LNG ship training.

The ad hoc committee has already recognized the flexibility of the union schools in meeting short-term emergencies.

Mr. Chairman, I would like to say on the LNG training—and I submit if you want it this textbook prepared by the instructors at our school to teach the LNG—ships are being built. The people are being trained. And they will be adequate to man the ships as they are delivered.

Contrarily, all of your Federal and State maritime academies have not trained one person—and I know of no program to train one person—for these entirely new technology ships. We would have had this book printed and out in the marketplace. We have not had it printed for one simple reason, Mr. Chairman: There are still several questions that the U.S. Coast Guard has not answered yet. They are investigating them, and when they answer those questions and set the regulations, then the book will be printed and be available to everybody.

That raises an interesting question.

I think, Mr. Chairman, you should ask each academy that is getting a Federal subsidy to give you a list of the books, the technical books, that their instructors or professors have written or the academy has published, or technical papers that have been written and published.

Mr. Chairman, you will find this is an educational wasteland. The old adage for college professors is "publish or perish." It is reversed 180 degrees in the maritime academies.

In their testimony before this subcommittee, the academies took exception to the ad hoc committee's determination. They claim that they have proved their ability to meet national emergencies during two World Wars and the conflicts in Korea and Vietnam. Those claims are more empty rhetoric, and I challenge them to come forward with the facts to back them up.

Mr. Chairman, I went through one world war and two national emergencies, and the academies simply did not train the people.

The training of World War II was done in New London, Conn., and Alameda, Calif. I went to the New London, Conn., school myself.

They took in a class every 2 weeks. The class had 8 sections with about 10 students each. There was about 250 incoming students every 2 weeks for a 4-month course.

Those two schools—and these were students coming from the active ships, from the ranks of unlicensed personnel—supplied the manpower to man the ships.

In Vietnam, we know what they did; and in Korea we know what they did. It was the same as Vietnam, Mr. Chairman.

Last night after I got home, after we got this testimony halfway put together I sat down and tried to put down on paper what the unions have done in the Vietnam emergency to move the ships, and I listed them.

First, we allowed men to take their vacation pay without taking time off. That meant a change in the existing rules.

Number two, we upped the number of days required for a pension credit. Prior to Vietnam, Mr. Chairman, it was 200 days. During Vietnam we raised that pension credit to 280 days to try to force the men to sail more days per year.

We solicited our pensioners to return to work. We got a couple of hundred of them back. We would not fill any job above what was the absolute Coast Guard minimum on each ship, even though that made a lot of our membership mad and some of our companies mad.

We set up a national system to concentrate on any ship that was threatened with delay. If there was a ship with a vital shipment going to Vietnam, no job in the entire United States would be filled until her hold was filled so the ship could move.

We put a vice president in Vietnam permanently for the duration of the war to take care of some of the social problems, the terrible runs, un-air-conditioned ships. They laid there for 4 or 5 months at anchorage to get the longshore work done.

The military would not grant us shore leave. We had terrible problems there; and after a man had made one or two trips, he did not want to go back any more because of those conditions.

We opened two training schools that turned out people. We worked with the Coast Guard very diligently to get them to issue a temporary license.

We got them to reduce the number of years required in the school from 3 years to 2 years, Mr. Chairman. We set up our school on a 2-year program. We gave leaves of absence to people that were on air-conditioned ships on a rum and romance run in excess of the Coast Guard minimum manning so he could leave the air-conditioned ship and go to Vietnam and sail on those rusty buckets, and subsequently return to his regular vessel.

We actively recruited in all areas, including radio and television. We recruited in the Great Lakes to give the Great Lakes engineers in their winter season when they were laid up an opportunity to come and sail the Vietnam ships.

Mr. Chairman, that is a partial record of what the unions did. I challenge you to let any and all of the State maritime and Federal academies come in and show you what they did, in fact, and not rhetoric.

The academies will never be able to respond effectively to emergencies because they value their 4-year accredited college status too

highly. The Kings Point academy got its start during World War II with an 18-month program. Later, they became a 4-year accredited college, as did all of the State academies.

California has not quite made it, and Michigan is a 3-year credit.

National emergencies require crash training programs, and crash training programs require something less than a 4-year program.

At the MEBA school, we have not only demonstrated that we are more flexible in adapting our curriculum to new maritime technology, but we have also demonstrated our flexibility in responding to national emergencies.

We started in September of 1966 with 27 students. A class of 30 to 35 persons was enrolled every 2 weeks with a goal of graduating 350 marine engineers per year to man ships for the Vietnam sealift.

In January of 1969, due to the projected reduction in the need for maritime manpower, the school started to reduce the number of entering classes each year.

In August 1970, the MEBA school changed its curriculum from a 2-year course to a 3-year course.

This change was the decision of the MEBA Board of Trustees based on studies made by MEBA on manpower needs.

It was made 1 full year before the U.S. Coast Guard terminated the temporary licensing provisions that had been instituted to increase officer manpower during the Vietnam war.

The school further reduced the number of entering classes in 1972 and has continued to maintain a maximum of six entering classes per year, with a goal of graduating approximately 90 third assistant engineers per year. This record should be contrasted with the inflexibility of the Federal and State academies to which I referred earlier in my statement.

Let us not be fooled that the great volume of surplus academy graduates provides any cushion in the event of a national emergency. During the Vietnam war—when ships were sailing short and some ships were unable to sail due to manpower shortages—the Maritime Administration compiled a list of licensed officers. They then attempted to contact these people to get inactive officers to return to sea. Only a handful came back as a result of that effort.

The last report I got, Mr. Chairman, was they got two after sending out thousands of letters.

MEBA solicited its pensioners for the same purpose and got about 200 of them back to sea.

No one blamed the academies when a ship did not sail with supplies for Vietnam. They blamed the unions. But the heart of the problem, then, as it is now, was the means this country uses to train its mariners.

Mr. Chairman, it is the Federal and State maritime academies which must bear the primary responsibility for failure to adequately train active seagoing officers.

What other program in this country uses \$13.7 million in Federal money and seven Government-run schools to train 3,500 people for largely nonexistent jobs? What other small industry gets this type of Government attention?

Surely we need active merchant marine officers; but, just as surely, we are not getting them from the academies. And we are paying a high price tag with very poor return in terms of meeting the needs

of our merchant marine and increasing our readiness for national emergencies.

One other calculation I did last night I would like to put in at this point, because there was some question of what the academy graduates cost and compared to the cost of military academy graduates.

Mr. Chairman, my simple calculation last night to estimate the Federal dollars needed to train 1 man in the State and Federal academies for a seagoing career—and he follows that seagoing career—is slightly more than \$200,000 per man.

The cost of training that same man if you include the State subsidies and the Federal subsidy and property, plant and equipment is in excess of \$400,000.

When the Federal budget is so constricted by inflation and unemployment; when we have so great a need to train doctors and dentists for innercity and rural communities; when we have so many other needs for trained professionals and skilled technicians, how long can we afford to go on wasting taxpayers' money on a program which is providing so little benefit?

Mr. Chairman, MEBA sees no need for the Federal and State maritime academies as they are presently functioning. They have failed in their obligation to train active merchant marine officers; rather than provide any increase Federal funding for these academies, we hope this Subcommittee will take another look at the quality of education being offered by them, the results achieved in terms of active officers trained and serving in the merchant marine, and the future manpower needs of the U.S.-flag fleet.

Then if it is determined that there is a continued need for these schools, establish a statutory limitation on their enrollment and provide an adequate level of Federal financial assistance for their students.

Charges have been made before this subcommittee that MEBA has excluded graduates of the Federal and State academies from getting shipboard jobs. Those charges are completely false.

Let me say at this point, Mr. Chairman, because this is a very shocking think to me—Mr. Man in my office received a phone call a few days ago from one of the members of the minority counsel of this subcommittee, and he said we expect you to address your statement to discrimination in employment practices by MEBA, including NLRB and court decisions, and be prepared to discuss that issue at this hearing.

Mr. Chairman, that was a shocking phone call to me because I went back and I read the bill.

Mr. Chairman, I do not see a single solitary item in the bill about that. As a matter of fact, if it had been there, I am quite sure the bill would have been put into House Education and Labor Committee, not the Merchant Marine Committee. They have the jurisdiction over the labor laws of this country.

Mr. DOWNING. I am not aware of that inquiry by the minority counsel, but I rather imagine he was forewarning you that the charges had been made during the hearing, whether they were germane to the subject or not, that your union had been discriminatory in its hiring practices and I rather imagine he was trying to apprise you of that fact rather than directing you to testify on the subject.

Mr. CALHOON. He was not apprising me of the fact. He was giving me orders. And it was shocking to me.

I have already stated that about 12 percent of our active membership comes from the academies. That number would be far higher were it not for the high attrition rate of academy graduates who pursue a seagoing career.

On the one hand, a witness appeared before this subcommittee stating that not one of the 1975 Kings Point graduates obtained seagoing employment aboard U.S.-flag oceangoing ships. But on the other hand, the California maritime academy advertised just 2 months ago that 98 percent of its 1975 graduates had jobs within one month of graduation, and that "Most of these high-paying jobs center around careers at sea aboard American-flag ships." This is attached as appendix C.

We see no way these two statements can be reconciled, but we do see the California advertisement as a cruel hoax. That school is trying to lure students in large numbers—the more students the better.

But after those students go through 4 years of training, they find out there are no jobs. Why must the academies be permitted to pursue senseless high enrollment policies which can only result in frustration and higher maritime unemployment and frustration of their graduates?

Mr. Chairman, MEBA does not and never has discriminated against the graduates of academies. Any lack of jobs for these graduates is due to the declining size of the U.S.-flag fleet and the overproduction of officers by the academies. Our union treats all applicants on an equal footing.

Testimony has also been offered before this Subcommittee in support of a proposal to have mandatory retirement for licensed officers. About 2 percent of our active membership is over age 65, and all of these men are working to complete their required pension credits for retirement.

We have very a attractive pension program which provide its own incentives to retire. Mandatory retirement will not serve to open up any more than a handful of engineering jobs.

What the academies are asking you to do is to kick these old people out into the garbage heap without any pension whatsoever. Mr. Chairman, that we are not prepared to do.

The median age for engineers in 1972 was 48 years. That represented a 1 percent increase in the median age over 1962 compared to a 3.3-percent increase in the median age for all seamen.

The suggestion has also been raised before this subcommittee that the Government conduct regular physical examinations for all licensed officers.

MEBA already requires its active membership to undergo a stringent biannual physical examination by board-certified physicians. And every engineer must undergo a preemployment physical examination prior to signing on a job.

Clearly, there is no need for the Government to conduct physical examinations for engineering officers.

This is the proposal of the supporters of the academies.

Yes; Mr. Chairman. I see several pairs of eyeglasses among the committee, but the testimony you have heard before this committee is if

you wore eyeglasses, they would kick you off the ships so they could make room for a so-called qualified academy graduate.

Mr. Chairman, I think they are trying to set up a medical profile system that would set physical standards on entrance the same as the Marine Corps so it would force the existing workers out of their jobs onto the gargabe heap; and we will fight it with every breath we have in our bodies.

This is the most antiunion, antihuman being proposal that I have seen come before this committee in my lifetime and we have had some lulu's here, Mr. Chairman.

On a similar subject, section 7 of H.R. 10413 directs the Commerce Department and the Coast Guard to undertake:

A thorough review of the laws, regulations, and policies which pertain to the renewal of the licenses of merchant marine officers to determine if existing renewal procedures provide for the adequate testing of officers' retention of basic skills, et cetera.

What other profession has to meet a reexamination requirement? Not doctors; not lawyers; not plumbers, electricians or licensed auto mechanics.

Why do we get singled out? This is the most regulated group of workers in the world. So the Academy can force out the man the employer has hired and is satisfied with and is doing his job. So you can force him out to put another Academy graduate into his job.

Mr. Chairman, this is going from the sublime to the ridiculous. This is not just antiunion. This is antihuman being.

As a group, seamen are already the most Government-regulated private industry occupation. Everything from the food they eat, the room in which they sleep, to their conduct aboard ship and on shore is covered by a regulation.

We view the end result of section 7 as doing little, if anything, for the quality of our merchant officers. But it will provide the means to push out part of the existing workforce so that the academies' oversupply of graduates can get jobs.

If he had one marijuana cigarette in his home, his license is revoked and his right to make a living is destroyed in the maritime union.

We are the only class of people in the United States that live under the whip of such terrible laws, and now let us put some more on these poor slouches.

We are also opposed to section 6 of H.R. 10413. That section directs the Coast Guard to maintain a list of licensed merchant marine officers which can be used "in the event of any national emergency."

I spoke earlier of the ineffectiveness of a similar list during the Vietnam war. It is not likely to be any more effective in the future. But this type of list could be made available, under the wording of the proposed legislation, in labor disputes. We view section 6 as an unnecessary and potentially antilabor provision.

Mr. Chairman, to explain what I said there, this bill directs itself to a national emergency. The Taft-Hartley injunctive procedure also directs itself to a national emergency.

If the Federal Government is successful in the Federal courts in proving there is a national emergency and getting the 80-day cooling off injunction, and the labor dispute is not finished by the 80th day,

Mr. Chairman, under this language, this list that is supposed to be compiled by the Coast Guard will be readily available and I quote that "readily available" to any strikebreaker that wants to break a strike throughout the United States; because the Federal Government and the courts have already determined that a national emergency exists.

I will tell you, it stinks to high heaven of antiunion prejudice.

Mr. Chairman, if you dig into your staff you will find Academy graduates that do not even know the meaning of the word "mechanics" and instead of serving their country like they are committed to do when they took a free education in the academies, they choose to come here and be word mechanics to screw the poor working merchant seaman.

Finally, Mr. Chairman, I want to say a few words about the failure of the academies to attract blacks and other minority students.

Their efforts have been an abomination. At a time when colleges throughout the country are making significant attempts to achieve equal educational opportunity, our maritime academies have lagged far behind the field.

I have cited several reasons together with supporting data for MEBA's opposition to the legislation before this subcommittee. MEBA is proud of its engineering school and what it has accomplished for the good of our merchant marine.

We seek neither to expand our enrollment nor to limit other sources of training.

There are other sources of training that have not been mentioned in this hearing; and we are in no way trying to get a monopoly. There are purely commercial training schools in the major seaports of the Nation. They train unlicensed people to get their license.

They also train and upgrade between the rates of license for both mates and engineers. These commercial schools have been long existent and have a long heritage of good work, and personally we support them.

We support them so much, Mr. Chairman, that if our member goes to their school and raises his license through those schools, we pay his tuition. That is how much we believe in the free enterprise system, even though we have a school in Baltimore where he can go and do the same thing.

If he does choose to do it in Seattle or New York or New Orleans or Houston or Boston or wherever it may be, we will pay his tuition fee.

Mr. Chairman, that is why we have come before the subcommittee today. And that is why we hope that this subcommittee will withhold its approval of the Maritime Academy legislation before it.

Mr. DOWNING. Thank you very much, Mr. Calhoun, for a very interesting statement, albeit a very controversial one.

The various tables appended to your statement will appear in the record at this point.

[The tables referred to follow:]

TABLE 1.—*Maritime Jobs*

Deck and engine shipboard jobs:

October 1, 1964.....	13, 081
December 1, 1973.....	7, 866
October 1, 1974.....	7, 352
October 1, 1975.....	6, 484

TABLE 2.—*Number of ships in U.S. flag fleet as of September 30, selected years*

Year:	Number of ships
1946	2, 332
1950	1, 082
1954	1, 053
1958	937
1962	885
1966	1, 006
1970	770
1975	540
Percent decline in U.S.-flag fleet, Sept. 30, 1946, to Sept. 20, 1975.....	76. 8
Percent decline in U.S.-flag fleet, Sept. 30, 1970, to Sept. 30, 1975.....	29. 9

Source: Maritime Administration, U.S. Department of Commerce.

TABLE 3.—UNITED STATES AND STATE MARITIME ACADEMY GRADUATES: 1954-74

	1954	1959	1964	1969	1974
California Maritime Academy.....	49	54	72	67	52
Maine Maritime Academy.....	61	58	94	118	116
Massachusetts Maritime Academy.....	60	56	56	58	69
New York Maritime College.....	95	66	126	1357	114
Texas Maritime Academy.....	(1)	(1)	(1)	2	12
Subtotal.....	265	234	348	405	363
U.S. Merchant Marine Academy.....	159	224	191	213	182
Total graduates.....	424	458	539	618	545

¹ No graduating class until 1966.

TABLE 4.—PROFILE OF THE U.S. FLAG FLEET AS OF SEPTEMBER 30, 1975

I. Designation.....		14	48	103	27	25	10	14	7	2	85	2	6	3	1	3	2	87	101	540																				
		Freighter		Containerized *		Bulk		Tanker		Other		Total																												
		126		121		10		227		56		540																												
II. Type.....		Active cargo-carrying		Temporarily inactive *		Laid up		Total																																
		460		48		23		540																																
III. Status.....		Converted		Jumboized		Total		Percent of total active fleet																																
		90		52		142		26.3																																
IV. Conversions.....																																								
V. Age:		37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Total
Age in years: number of ships.....		1	0	1	2	9	32	48	53	10	1	2	5	1	2	9	19	19	6	6	9	14	13	20	24	22	28	15	12	13	11	18	17	14	15	15	26	17	11	540
		0 to 5 yr		6 to 10 yr		11 to 15 yr		16 to 20 yr		21 to 25 yr		26 to 30 yr		31 to 35 yr		Over 35 yr		Total.																						
Age by group in percent.....		18.1		13.2		20.2		8.9		9.3		13.1		17		0.2		100																						

Source: "Status of U.S. Flag Merchant Fleet as of Sept. 30, 1975" (excluding ships operating exclusively on the inland waterways, Great Lakes, those owned by the Armed Forces, and those of a special character such as tugs, cable ships, tawlers, etc.), Maritime Administration, Office of Subsidy Administration, Division of Trade Studies and Statistics, U.S. Department of Commerce.

¹ Includes primarily those in "Private" category.
² See explanatory note above.
³ Includes containerships, containerized barges, etc.
⁴ Those ships with no cargo.

TABLE 5.—COMPARISON OF RESULTS ON EXAMINATIONS FOR 3D ASSISTANT ENGINEER FROM STUDENTS AT VARIOUS NAUTICAL SCHOOLS,
JANUARY TO DECEMBER 1974
[Percentages]

	Examinations						Reexams					
	Steam			Motor			Motor			Total		
	Pass	Fail	Partial	Total	Pass	Fail	Partial	Total	Pass	Fail	Total	Total
United States (Kings Point).....	44.23	13.46	42.31	100	58.65	13.46	27.89	100	70.17	29.83	100	100
California.....	96.00	0	4.00	100	96.15	0	3.85	100	0	0	0	0
Maine.....	13.75	48.15	32.10	100	22.22	43.21	34.57	100	45.45	54.55	100	100
Massachusetts.....	7.31	63.42	29.27	100	7.31	63.42	29.27	100	66.67	33.33	100	100
New York.....	62.26	0	37.74	100	62.26	0	37.74	100	0	0	0	0
Texas.....	66.67	13.33	20.00	100	40.00	13.33	46.67	100	0	100.00	100	100
Average of above schools.....	49.37	23.06	27.57	100	47.44	22.24	29.99	100	45.57	54.43	100	100
Calhoun Mesta School.....	70.45	6.82	22.73	-----	74.22	6.19	19.59	100	85.71	14.29	100	100

Source: Original data supplied by the U. S. Coast Guard, Merchant Vessel Personnel Division.

TABLE 6.—*Employment of graduates; U.S. State maritime academies summary, 1951-60*

	Percent
Merchant marine afloat-----	23.08
Merchant marine ashore-----	13.60
Subtotal-----	36.68
Active duty—military-----	19.18
Total graduates in maritime jobs-----	55.86
Graduates with more than 5 years at sea: merchant marine-----	5.05
Graduates with more than 5 years at sea: active duty—military-----	6.02
Total graduates with more than 5 years at sea-----	11.07

TABLE 7.—ACTIVE MEMBERS AND APPLICANTS OF DISTRICT NO. 1—PACIFIC COAST DISTRICT AND DISTRICT NO. 2, MEBA WHO ARE GRADUATES OF FEDERAL AND STATE MARITIME ACADEMIES

Year	California	Maine	Massachusetts	New York	Texas	United States	Total
Prior to 1941-----	4	0	10	9	-----	1	24
1941-45-----	16	3	5	4	-----	132	160
1946-50-----	4	6	5	4	-----	36	55
1951-55-----	14	8	7	1	-----	8	38
1956-60-----	13	11	10	4	-----	32	70
1961-65-----	65	27	25	9	-----	52	178
1966-70-----	99	85	42	22	15	96	359
1971-75-----	36	42	7	6	3	36	130
Total-----	251	182	111	59	18	393	1,014

TABLE 7a.—CAREER ANALYSIS OF MEBA MEMBERS AND APPLICANTS WHO WERE GRADUATES OF THE FEDERAL AND STATE MARITIME ACADEMIES—1965 AND 1968

	1965 ¹	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
(1) 1965 Academy graduates: Number of Days Worked....	5,661	17,947	11,120	10,032	8,636	6,263	5,113	4,559	2,967	3,902	1,931
	1963 ¹	1969	1970	1971	1972	1973	1974	1975 ¹			
(2) 1968 Academy graduates: Number of days worked....	12,390	19,548	15,730	10,850	8,853	7,096	6,671	3,274			
		1966-68		1969-71		1966-74		1969-74			
Percent change		-44.1		-44.5		-73.8		-65.9			

¹ 1st year in series does not reflect 12 mo in most cases since graduation came during that year. 1975 data not yet complete.

TABLE 8.—*Cathoon MEBA Engineering School: Classes enrolled by year*

Year:	Number of classes enrolled
1966-----	4
1967-----	20
1968-----	19
1969-----	18
1970-----	15
1971-----	8
1972-----	6
1973-----	6
1974-----	6
1975-----	6

TABLE 9.—MARITIME ACADEMY COST PER ENROLLEE: 1974

School	Number of students	Cost per enrollee	Total cost	Federal cost
California Maritime Academy.....	315	\$8,787	2,767,905	\$711,352
Great Lakes Maritime Academy.....	90	7,636	687,240	242,596
Maine Maritime Academy.....	534	7,224	3,862,956	645,114
Massachusetts Maritime Academy.....	720	5,041	3,629,520	936,416
New York Maritime College.....	680	6,792	4,618,560	854,434
Texas Maritime Academy.....	115	14,242	1,637,830	406,182
Sub-total.....	2,454	7,011	17,204,011	3,795,094
U.S. Merchant Marine Academy.....	1,035	9,550	9,884,250	9,884,250
Total.....	3,489	7,764	27,088,261	13,680,344
Calhoun MEBA School.....	324	5,560	1,801,440	0

Source: Based on data contained in the report of the Ad Hoc Committee on Maritime Education and Training, serial No. 94-D, 1975.

[Committee note.—Appendix A placed in files of subcommittee.]

APPENDIX B

SAMPLING OF BACKGROUND OF 2,096 LICENSED OFFICERS¹

Background	Number	Percent
Hawsepipers (came up through ranks).....	1,611	76.9
U.S. Merchant Marine Academy.....	100	4.8
Maine Maritime Academy.....	87	4.2
State University of New York Maritime College.....	72	3.4
California Maritime Academy.....	49	2.3
MLA Engineering School.....	44	2.1
Massachusetts Maritime Academy.....	37	1.8
Texas A. & M. University.....	7	.3
Great Lakes Maritime Academy.....	3	.1
Other.....	59	2.8
No record.....	27	1.3
Total.....	2,096	100.0

¹ Includes masters.

Source: Data supplied to the House Merchant Marine Subcommittee by Captain Emery U.S. Coast Guard, MARAD Liaison Officer.

[APPENDIX C]

(Press release for immediate release.)

CALIFORNIA MARITIME ACADEMY,
Vallejo, Calif., October 7, 1975.

CAL MARITIME NOW TAKING APPLICATIONS

The California Maritime Academy, the West's only maritime college, is now taking applications from men and women for the class entering in the fall of 1976. Upon the successful completion of studies, Cal Maritime students are awarded a Bachelor of Science degree in either Nautical Industrial Technology or Marine Engineering Technology. In addition, the graduates are licensed by the U.S. Coast Guard as third mates and third assistant engineers for U.S. Merchant Marine vessels. Last year's graduates went to work at incomes ranging from \$15,000 to \$18,000 per year. In addition, qualified graduates may receive a commission as Ensign in the U.S. Naval or Coast Guard Reserve.

Highlight of the Academic year at Cal Marine for the students is the annual training trimester-at-sea aboard the Academy's 491' Training Ship GOLDEN BEAR. During the student's four years at the Academy, a minimum of six months sea time is logged. Past cruises have included stops at such ports as Auckland, Sydney, Fiji, Honolulu, Cristobal, Balboa, Galapagos, Acapulco, and Mazatlan.

Applicants must be high school graduates between the ages of 17 and 24 upon admission. (Veterans are accepted up to age 27). Transfers from other colleges may receive up to one year of credit for the four year program. The Academic Dean, Wilbur H. Parks, points out that applicants would do well to apply early, as spaces are limited.

Cal Maritime, a publicly funded institution of higher learning, offers challenging career opportunities to its graduates and it has one of the highest job-to-graduate rates in the country. Members of last year's graduating class had two to three job offers to choose from and some 93% of the class was employed less than one month after graduation from the four year course of study. Most of these high-paying jobs center around careers at sea aboard American Flag ships.

A 5.7-million dollar building program is currently underway at the nautical school, situated on the Carquinez Strait in Vallejo, and new dormitory facilities will allow the school enrollment to jump to a maximum of 468 students over the next three years.

Catalogs, application forms, and financial aid information will be sent upon request. Queries should be addressed to the Admissions Office, California Maritime Academy, P.O. Box 1392, Vallejo, Ca. 94590.

[APPENDIX D]

M.E.B.A. DIAGNOSTIC CENTER,
New Orleans, La.

Name: John Doe.

Age: 48.

Sex: Male.

Date of examination: June 17, 1971.

Case No.: 25369.

Height: 72 inches.

Weight: 158 pounds. The patient presents with no chief complaint, except for difficulty with hearing.

PAST HISTORY

The past history reveals no serious injuries or illnesses. There have been no operations. He had the usual childhood diseases of measles, mumps and chicken pox. He has not had whooping cough, scarlet fever, diphtheria, rheumatic fever, polio, or problems with tonsillitis or kidney disorders. There is no history of T.B., malaria, typhoid or cholera or yellow jaundice. He smokes one and a half packs of cigarettes per day and has done so for a number of years. He drinks approx. 2 cups of coffee per day. He drinks alcohol in spells, having as many as 10-12 beers at these times.

FAMILY HISTORY

His father died at age 67 with severe rheumatoid arthritis and heart trouble. His mother is age 70 living and well. He has 2 brothers and 1 sister, all living and well. There is no family history of high blood pressure, T.B., diabetes, strokes, kidney trouble, anemia, migraine, epilepsy or cancer.

REVIEW OF SYSTEMS

Head: Negative.

Eyes: Negative.

Ears: Mild hearing deficit.

Nose: Negative.

Mouth: Negative.

Throat: No dysphagia or hoarseness.

Neck: Negative.

Chest: Morning cough productive of a whitish sputum with black flecks only. No history of hemoptysis or chest pain.

Heart: Negative. No orthopnea, dyspnea, or cyanosis or pain.

G.I.: Completely normal. No nausea, vomiting, diarrhea, constipation, or melena.

G.U.: No dysuria, urgency, frequency, nocturia, hematuria or incontinence.

Bones, joints, extremities: Negative.

General: The patient has been in good health. No history of fever, chills, fatigue or weight loss. There is no endocrinological or neurological history of abnormality. The patient had suffered from hemorrhoids 4 to 5 years ago. He was

given suppositories and has had no further difficulty therewith. He has had no bleeding hemorrhoids. The patient contracted a rash of his hands, mainly between the fingers a year ago in his travels to Southeast Asia. This has persisted in a mild form. The patient is married and living with his wife. He has no children.

PHYSICAL EXAMINATION

General: The patient is a well developed, tall, thin, male appearing about his stated age of 48 years. Blood pressure 140/70 in both arms, pulse 64 and regular. Respirations 16.

Skin: The skin is fair with small areas of sunburn type erythematous rash over the face, neck and upper extremities. There is an erythematous, partially denuded rash between the second and third, and third and fourth fingers of both hands.

Head: Normocephalic.

Eyes: The pupils are round and regular and react to L. & A. The conjunctivae are normal. The fundi are normal. The discs are seen and have clear margins.

Ears: Normal.

Nose: Normal.

Mouth and throat: Edentulous. Otherwise normal.

Chest: Equal and symmetrical in expansion.

Heart: No cardiomegaly. PMI in the midclavicular line under the 6th rib. No murmurs, thrills or gallops.

Lungs: Clear to A. and P.

Abdomen: Normal. No organomegaly.

Genitalia: Normal adult male. No hernia.

Extremities: Negative.

Neurological: DTR's are equal and active bilaterally. No Babinski's Sensory and motor function intact. The pulses are palpable and symmetrical in both radial, brachial, femoral or dorsal pedes. The brachial arteries are tortuous and somewhat hard to palpation.

SPECIAL TESTS

Audiogram: There is a 3% loss in the left ear, an 18% hearing loss in the right ear, with a combined hearing deficit of 6%. Some loss in the right ear in the speech range as well as the high speech range for the left ear.

Spirometry: Forced expiratory volume is 77% of predicted value, 3.7 liters, which is within normal limits.

EKG: ST segment in standard 1 is slightly flattened. There is a RSR prime in V2. however, the tracing is generally within normal limits.

Proctoscopic and anal: Digital exam reveals two firm nodules within the right and left lobe of the prostate which are hard. There are no other intrinsic or extrinsic masses to digital examination. Proctoscopic to 25 cm. is within normal limits.

Additional Dictation Dated June 24, 1971.

Laboratory Data: The CBC is within normal limits. The VDRL is nonreactive. The urinalysis is within normal limits. The EPA and lateral views of the chest show thoracic scoliosis with convexity to the right, otherwise, within normal limits. For the 12 channel chemistry screen see the attached sheet. The 2 hr. post prandial blood sugar is within normal limits except that it is slightly elevated to 140 mg. per cent.

IMPRESSIONS

1. Fungal skin rash, both hands.
2. Early generalized arteriosclerosis.
3. Bilateral hearing loss.
4. Chronic bronchitis, mild to moderate.
5. There are 2 hard nodules within both lobes of the prostate, probably representing benign prostatic hypertrophy.
6. Rule out diabetes mellitus.

RECOMMENDATIONS

1. The patient should have a 3 hour glucose tolerance test, and is referred to his private physician for further evaluation of the prostatic problem.
2. Yearly follow-ups at the MEBA Diagnostic Center are recommended.

HEMATOLOGY, SEROLOGY AND UROLOGY REPORT

Hematology

WBC $\times 10^3$	10.2
RBC $\times 10^6$	4.55
Hgb. gm.	14.8
Hct (percent)	45.8
MCV μ^3	100
MCH μg	31.5
MCHC (percent)	31.4
POLY	56
STAB	10
LYMPH	15
MONO	16
EOS	1
BASO	2
Blood sed rt.	2
Mild anisocytosis	
Slight poikilocytosis	
Adequate platelets	

Serology

VDRL ----- nonreactive

Urology

Blood	Negative.
Ketones	Do.
Protein	Do.
Glucose	Do.
P.H.	5.
Specific gravity	1.025.
Sediment	pus 5-8/HPF.

RADIOLOGICAL REPORT

Chest, EPA and lateral views: There is a thoracic scoliosis convexed to the right. No other significant findings are shown. The cardiac and mediastinal structures are within normal limits.

R. FORTENBERRY, M.D.,
Radiologist.

Mr. CALHOON. Mr. Chairman, I would like to submit some additional material for the record. In my morning mail I found two more regulations affecting merchant seamen. I would like to read this one.

This is from American President Line, special notice all crew members, S.S. *President Tyler*, item 4, long hair.

It reads:

Crew members will not be allowed ashore in Singapore if their hair violates the current normal standards of the Singapore Government requirements, that is, length in front not below the eyebrows and length in back not extending over shirt collar, and sides not extending over the ears.

These requirements are brought to your attention to avoid misunderstanding and penalties for prompt haircuts under duress. This is stringently enforced.

We not only have the U.S. Government enforcing standards but foreign governments.

There is a new one here under the Freedom of Information Act, statement by the U.S. Coast Guard, and I would like to submit it for the record because we do not understand it all. Unless you sign a waiver of some of your rights, the U.S. Coast Guard will not process your allotment to your next of kin.

Mr. DOWNING. Without objection, the paper will be made a part of the record.

[The document referred to follows:]

CG-722—ALLOTMENT NOTICE

PRIVACY ACT STATEMENT

In accordance with 5 USC 552a (e) (3), the following information is provided to you when supplying personal information to the U.S. Coast Guard.

1. Authority which authorized the solicitation of the information: A6 USC 599.
2. Principal purpose(s) for which information is intended to be used: (1) this form is used by seamen wishing to establish an allotment from their pay to an individual or institution provided for in the applicable regulations. (2) The form is completed by a U.S. shipping commissioner, signed by the seaman, and processed for implementation by the shipping company.

3. The routine uses which may be made of the information: the allotment notice is not incorporated into the seaman's official file and therefore is not of any further use to the Coast Guard once it is forwarded to the shipping company for implementation.

4. Whether or not disclosure of such information is mandatory or voluntary (required by law or optional) and the effects on the individual, if any, of not providing all or any part of the requested information: disclosure of the information is voluntary, but if the seaman does not execute the form or provide the necessary information then no allotment from his pay can be established.

(Signature of seaman)

Mr. CALHOON. I also have here, which I think may be of interest, literature from the Department of the United States Navy requesting our school to train naval personnel.

Mr. Chairman, we have no disagreement with training the navy personnel. We only had one disagreement with the Navy, and we have trained either four or five classes of Navy personnel.

Our disagreement was we were absolutely committed to not take one dime of Federal money into our training school because we knew the Federal Government knew how not to run training programs and we did not want to get into that.

We worked it out with the Navy that we would not pay a tuition, but they had to pay something for their records and they paid for the use of the equipment they used.

Mr. DOWNING. That will be submitted for the record.

[The document referred to follows:]

DECEMBER 4, 1975.

To: Mr. Jesse M. Calhoon.

From: Mr. Luebke.

It was the decision of the Trustees of the MEBA Training Plan that the Navy be permitted to use our facilities at no cost to them. The dates of the use were as follows: August 9 to August 21, 1971; January 10 to January 28, 1971; June 5 to June 23, 1972; and November 6 to November 24, 1972.

DEPARTMENT OF THE NAVY.
NAVAL SHIP SYSTEMS COMMAND,
Washington, D.C., December 24, 1969.

Mr. J. M. CALHOON.

President, National Marine Engineer Beneficial Association,
New York City, N.Y.

DEAR Mr. CALHOON: The U.S. Navy has installed the General Electric Central Operations System (COS) aboard various classes of ships in the fleet. This installation has created an urgent requirement for a training program to train operation and maintenance personnel for the fleet.

67-971-76-12

The Naval Ship Systems Command is currently in the process of developing, with General Electric, a modified version of the COS. This modified COS will be installed at the Navy Development and Training Center, San Diego and will be available for the training of Navy personnel approximately January 1971. In the interim, the U.S. Navy has no capability of its own for the training of the operation and maintenance personnel.

Recently, representatives from this Command visited the Calhoun Marine Engineer Beneficial Association Engineering School, Baltimore, Maryland. During their visit, they had the privilege of touring the school and examining the COS now in the process of being installed. It became apparent that the COS and the environmental factors would be well suited to meet the immediate training requirement of the Navy. In view of the installation of a COS unit adapted for training at your facility and the urgent requirement to provide trained personnel to the fleet, it is requested that consideration be given to making available the COS and suitable classroom space for this Command on a non-interfering reimbursable basis.

The training program planned for Navy personnel would consist of approximately a 15-day course for two groups of learners, all Petty Officers and/or Officers, 10 learners per group. It is currently estimated that the first group will convene in June 1970 with the second group convening in September 1970. The Navy groups could be scheduled at any time agreeable to you so as not to interfere or interrupt in any way the conduct of your regularly scheduled classes. General Electric Co. instructors will be provided by this Command for the conduct of the training course. In addition, funds can be made available to defray any costs required for the use of your facility and to replace any parts which may be damaged during the conduct of the training program.

It is requested that this Command be advised if this request could be granted. In addition, an estimate of any rental fee that may be required is desired so that the necessary funds can be budgeted.

The point of contact is Captain J. W. Hayes, Jr., USN, Director, Training Material Support Division, Naval Ship Systems Command, Washington, D.C. 20360 (telephone area code 202-0X 6-8087).

R. C. GOODING,
Rear Admiral, USN,
Vice Commander, Naval Ship Systems Command.

Mr. DOWNING. Thank you very much, Mr. Calhoun. I guess I can assume you are opposed to the bill.

Mr. CALHOON. That is the understatement of the year.

Mr. DOWNING. Thank you.

Mr. Emery will submit his questions for the record.

Off the record.

[The answers were not received by the time this hearing went to press.]

[Discussion off the record.]

Mr. DOWNING. Back on the record.

Mrs. Sullivan?

Mrs. SULLIVAN. Thank you, Mr. Chairman.

Thank you, Mr. Calhoun.

I want to assure you that there is no antiunion basis on my part, nor do I believe there is any any feeling by any member of this committee of an antiunion feeling, but it does not mean at least we cannot discuss things on which there are disagreements. And I think this is the one reason why there is a hearing, why there was a bill made up from the recommendations of the ad hoc committee and why I opposed the increase in the Federal participation when it was before the conference with the Senate on the Maritime authorization bill.

I think you know from the work I have been doing all these years that I feel we in the entire maritime industry—that is labor, congressional and all others—have to work together because I believe we are all devoted to a stronger merchant marine.

There is a lot of important work to do, such as the cargo preference legislation, and the only reason this was not taken up this year is because of the heavy layup of tankers. We did not want to have it vetoed again.

I think it is in the books that we will get it through in the next session.

Really, we should have resolved this question long before this time so that we can get on to other business, and we should have done it immediately when the ad hoc committee made the study.

As far as I know, there is nothing in H.R. 10413 which would encourage any school to turn out greater numbers of students, and what did concern the ad hoc committee on maritime education and training was the steady decline in the quality of students of our Nation's maritime schools that they had been able to attract to those schools.

Now, it is alleged, and I cannot buy this allegation, that increasing the subsistence allowance to students in the State maritime academies was designed to increase the quality rather than the quantity of students.

If you cannot get a higher grade of student with a lesser amount of subsidy, I do not think you are going to get any higher with a greater amount, because it was attracting evidently the middle income class. But those who were not too interested in formal education.

What I want to ask you is, Does the MEEBA school offer a liberal arts course?

Mr. CALHOON. No, ma'am.

Mrs. SULLIVAN. It is an engineering course, so they sign on as an engineer. They are thoroughly acquainted with that part of the ship's operation, is that it?

Mr. CALHOON. Yes, Madam Chairman.

Mrs. SULLIVAN. What do you think is a desirable and reliable way of protecting the future manpower requirements of the U.S.-flag merchant fleet for licensed officers?

This is one of the reasons we had, and I do not know if it is section 6 or 7, but we had called on the Maritime Administration to hold the annual meetings with representatives of all the schools which train individuals for initial licensing as officers.

At the present time, does your school discuss its enrollment plans with MarAd?

Mr. CALHOON. We do not discuss enrollment plans, but we do have indepth discussions on what the future of the industry portends for the next year, and we gear our school accordingly.

That is one of the factors we take into consideration when we set the number of students.

Mr. Chairman and Madam Chairman, we are aiming at graduating 90 students a year, and 90 is no magic number. That was the number that the professionals at our schools told us was the lowest minimum we could go to and keep an adequate staff and do the other things that are necessary and that we could expand in case of a national emergency. So our lowest common denominator to maintain the facility in existence is 90.

Mrs. SULLIVAN. Yours is a 3-year course.

What might happen 3 years from now you would have a project, is that correct?

Mr. CALHOON. Madam Chairman, I stand for election every 3 years. As a matter of fact, my ballots are being counted today, and I am not there, and I do not like that at all. I stand for election like every other officer in this union. If we oversupply and create a job crisis for our membership, we are going to be the ex-officers of the union.

Mrs. SULLIVAN. I understand.

Are you aware of the testimony of the Coast Guard before this subcommittee on November 19th of last year, 1974, to the effect that there were serious problems in the area of retaining, particularly in the so-called critical skills area?

For this reason, section 6 was included in the bill before the committee, and in order to enable both the committee and the Coast Guard to take a closer look at the current knowledge and ability of those who applied for renewal of their officer's license, and I think we all sweated out together a number of years ago, when we had to take ships out of the moth balls and get them to sea, and there were not the trained men and crew to go on the ships. And I remember the unions coming in, and I think this is when most of the schools were started, the unions coming in to say they were going to train men for the inland waterways as well as the oceangoing vessels.

I know the unions started up a number of schools so that they would not have to take people off the streets and train them on the job.

When we found out we could not get any of this information from the Coast Guard is when the entire idea came out how do we keep track of the people who go through the academies, our own King's Point, as well as our State academies; how can we keep track of those graduates who the United States or the Federal Government had helped to get an education, and yet, when we needed them, they were not to be found.

That is why that section was put in, to find some way, and never with the idea of trying to get strike-breakers to break up the union's strike.

Mr. CALHOON. My comment, Madam Chairman, is that they certainly saw it accommodated the injunction of the Taft-Hartley Act, not the idea you expressed. I am certain of that, and I have read the record very clearly.

This committee was not informed that this list had been made up during Vietnam and had been mailed out with great expectations. The last report I got, they had gotten two people to return, and no more than, Madam Chairman, you are going to get the attorneys for the minority side who are not going to return to sea.

Mrs. SULLIVAN. They hold no feeling of responsibility for having been given an education or helped to obtain an education?

Mr. CALHOON. That goes to our testimony about properly motivating the students at the academy.

Making a living in a maritime career is deprecated at the academies, Madam Chairman. If a kid fails an examination paper, he is told like you will make good seagoing material.

Madam Chairman, during this critical period of Vietnam when they were coming out of the academies and not sailing, or either sailing a little and not sailing any more, then I would say you can subpoena the records to see if they passed on the transcripts to other colleges where they go in for graduate work.

Madam Chairman, that is a complete violation of their obligation to this country.

Mrs. SULLIVAN. Thank you.

Mr. DOWNING. There is a vote on the floor of the House and we will have to recess. We will recess for about 15 minutes and when we get back here, we will go to room 1301, which is right across the hall. [Short recess.]

Mr. DOWNING. The subcommittee will come to order.

Mr. CALHOON, you stated that you would oppose a mandatory retirement age of 65 for the good reason that some of the people are trying to build up their retirement and, at the present time, they are over 65.

Should we pass a law making retirement mandatory at age 65, with a grandfather clause protecting those who are trying to get their pension entitlements, would you still object to such provisions?

Mr. CALHOON. Where does the money come from, Mr. Chairman?

I do not object to the principle, but the principle has to be paid for.

Mr. DOWNING. Actuarially, would it not work out the same as it does now?

Mr. CALHOON. No, sir.

I am not an actuary.

Mr. DOWNING. Spell that out for me a little bit because I am not either.

Mr. CALHOON. Well, let me go to the rules that we have had in our pension plan for many, many years.

Now, we are in a transition stage to get in compliance with this new Act that was passed last year, but under our old rules, a man could vest after 15 years of service and at age 65 he could pick up a 15-year pension.

If he did not have the 15 years, Mr. Chairman, at age 65 he could continue to work until he accumulated the 15 years, or if he had worked a number of days—and I am not quite sure how many it is, Mr. Chairman—but at the time he was age 70, he could pick up what pension he had accumulated, even though it was less than 15 years, or at age 72 he could get his pension, irrespective of what he had worked in the last several years.

Where the additional cost came in for each year of service he was getting, he had made a year of contribution, and the 15 years vested meant we had 15 years contribution.

Anything under 15 years vested was breakage with the plan. That breakage was actuarially put into the calculation to up to the benefits for the other participants.

Now, if now we have to give him the pension without the 15 years, we will be eliminating breakage. We will either have to reduce benefits or up the rate of contribution.

Mr. DOWNING. Mr. Calhoon, you were present when Mr. Leeper testified as to the human error in the maritime industry, were you not?

Mr. CALHOON. Yes, sir.

Mr. DOWNING. And those statistics were startling. Of the 15 nations studied, our country ranged, I think, 11th in order of safety, even though our country's merchant marine is the most regulated.

A part of that human error was apparently due to physical incapacities. It would seem that if you required medical examinations, perhaps you could reduce some of these casualties.

Mr. CALHOON. Mr. Chairman, I heard his testimony. I was not shocked by the high accident rate at all.

Mr. Chairman, you have to remember the age of the American ship compared to the other foreign fleets. We do not have the comparison with the other fleets, but they are readily available.

The American merchant marine is composed in great part of worn-out vessels. There is no difference between a ship and an automobile. If you go on a long trip in a 15-year-old car, you are going to have problems.

Mr. Chairman, if you go on a trip with a brandnew car, you should have no problems. And I have not seen the study and I know nothing of the study, but I would ascribe the accidents with the American ships in large part to the age of the ships and the worn-out equipment.

Mr. Chairman, American ships are pretty disgraceful in the ports of the world. It is not one of the places we show off to great advantage our modern technology when we send 25-, 30- and 35-year-old ships to these foreign ports.

Mr. Chairman, we are very much concerned about safety, and I would like to refer you to the appendix D, which is the type of examination you get in the MEBA clinics.

Mr. Chairman, there are very few people—I would say less than 5 percent of the people in the country that get this kind of thorough examination.

Mr. DOWNING. MEBA requires physical examination, does it not?

Mr. CALHOON. Yes, sir.

When you get to the blood test, it goes in the body chemistry. This man can get this report and take it with him so wherever he goes in the world, he has a medical record. He can check his biannually to see if there is any change in his body chemistry.

Mr. Chairman, his doctors can also check it. They can see if there is some potential problem developing.

Mr. DOWNING. Mr. Calhoon, as you can see, there is another vote on the floor.

Before we leave to vote, I would like to submit for the record a statement of the U.S. Maritime Service cadets of the State maritime academies.

Without objection, that will be placed in the record at this point. [The document referred to follows:]

STATEMENT OF THE U.S. MARITIME SERVICE CADETS OF THE STATE MARITIME ACADEMIES

(By Cadet Schoenster 1/C and Cadet S. Miller, 1/C. S.U.N.Y. Maritime College, Fort Schuyler, Bronx, N.Y., 10465, and L. Pettis, 1/C, Maine Maritime.)

Mr. Chairman and members of the subcommittee, the United States Maritime Service Cadets of the State Maritime Academies of California, Great Lakes, Maine, Massachusetts, New York, and Texas appreciate this opportunity to present our views on H.R. 1626 and H.R. 9804, bills to amend the Maritime Academy Act of 1958 (Public Law 85-672) to increase the USMS Cadet subsistence payment from \$600 to \$1200 per year at the State Maritime Academies, and H.R. 10413 and H.R. 10500, designed to implement recommendations of the Report of the Ad Hoc Committee on Maritime Education and Training.

Subsistence payments of \$600 a year to United States Maritime Service Cadets became effective in 1958. At that time, the average cost per year per Cadet for room, board, and the summer training period was \$500. The subsistence allowance more than covered the expenses incurred by a USMS Cadet. Today, in 1975, seventeen years later, the costs for "uniforms, books and subsistence" have increased five to six times that of 1958. The average cost of room, board, books, and uniforms is more than the \$1200 requested. Books and supplies alone average \$200 per

year. Maritime Service Cadets find it more difficult than other college students in defraying these costs since they are unable to work during the summer due to summer training period requirements; the only reliable source of aid is the presently inadequate Federal Subsistence Allowance. Therefore, it is our recommendation that the subsistence allowance not only be increased to \$1200 but that additional increases be tied to some formula to accommodate inflation. This would avoid the necessity of requesting special legislation due to inflationary reasons.

On another matter, Mr. Chairman, we would like to comment on our own employment outlook upon graduation as licensed officers in the U.S. Merchant Marine, as it relates to the MEBA union membership practices. As we look upon our own employment prospects within the Merchant Marine, we find the list of employers somewhat bleak. Because of manipulated rules favoring MEBA school students, Cadets of the Federal and State Academies are limited to employment by the non-union oil companies' ships and American Export Lines. Employment in other U.S. flag vessels is limited to class 2 MEBA members. Somehow MEBA school graduates obtain this privilege, whereas Federal and State Academy Cadets must wait for such a distinction. Hence, we feel our ability to fulfill our desire to serve the maritime industry as licensed officers on its flag ships is severely limited by discriminatory practices by the union. If unions question why some of us do not "ship out," perhaps they should ask themselves why they don't give us a chance!

Similarly, licensed Deck Officer graduates encounter membership problems with MM&P. Federal and State Academy licensed Third Mate graduates find themselves effectively blocked with MM&P membership due to seniority rules. This, we feel, discriminates against the younger U.S. Merchant Marine officers.

The Cadets of the Federal and State Academies are required to apply for, and accepted if tendered, a commission in the United States Naval Reserve. In training for this commission, a USMS Cadet receives instruction in naval science by U.S. Naval officers and are part of a regimented organization designed to instill leadership and enhance a Cadet's ability to make mature decisions regarding his area of responsibility. We believe that the graduates of the State Maritime Academies provide a well-educated, experienced, and mature group of people who are a tremendous asset in time of peace and, even more so, in time of national emergency.

Bearing in mind USMS Cadets' financial burdens, discriminatory union practices, and commitment to the United States Naval Reserve, we request that you rectify the inequities described.

Thank you, Mr. Chairman and Members of the Committee, for this opportunity to present the views of the U.S. Maritime Service Cadets at the State Maritime Academies.

Mr. DOWNING. We will see if we can get through the questions, but let me say to you, Mr. Calhoon, that you have been extremely patient and cooperative, and the Chair wants to thank you for that.

Mr. CALHOON. Thank you, Mr. Chairman.

Mr. DOWNING. We will recess at this time for about 10 minutes.

[Short recess.]

[Whereupon, Mr. Ashley assumed the Chair.]

Mr. ASHLEY. The subcommittee will resume.

In Chairman Downing's temporary absence, we will continue the questioning of Mr. Calhoon.

Mr. Biaggi.

Mr. Biaggi. First, I would like to comment on your statement in general.

It sounds like a declaration of war, a pretty extensive one, too.

Before we get into that, if you will, I think you made your position fairly clear in connection with one of the questions I am raising, so let's for the record get it clear.

Mr. Leeper of the National Academy of Sciences presented a statement this morning.

I do not know if you were there.

Mr. CALHOON. Yes.

Mr. BLAGG. Do you have any feelings about the National Academy of Science, Mr. Calhoon?

Mr. CALHOON. Not really.

I have served on a couple of panels with the National Academy of Science.

Mr. BLAGG. He talks in terms of the safety record of the U.S.-flag vessels, which does not rate as high as we thought it did.

He attributes some of the incidents to age and to physical fitness.

What is your reaction to a mandatory retirement system?

Mr. CALHOON. I am opposed to it.

We really just went through this just before the last recess, the last vote.

I am opposed to any compulsory retirement.

We have very few people in our union that are over age 65.

I think it is something like $1\frac{1}{2}$ or $1\frac{3}{4}$ percent. They are out trying to earn enough credits to get a pension.

We are just not going to throw anybody out in the garbage.

Mr. BLAGG. I will not quarrel with that philosophy.

But, let us see if we can modify it and get the pure question rather than deal with the exceptions.

Given the notion that you would protect their ability to earn a pension and given the notion that you are not going to throw anybody out in the garbage, what is your reaction to the pure concept of a mandatory retirement?

Mr. CALHOON. I want the same rules the U.S. Congress has.

Mr. BLAGG. You would not want the same rules I advocate.

Mr. CALHOON. I want the same rules the U.S. Congress has.

[Whereupon, Mr. Downing assumed the chair.]

Mr. BLAGG. Well, I do not think the equation is equitable.

Mr. Leeper tried to relate you to the airlines. I did not think that was exactly right, either.

Mr. CALHOON. Mr. Congressman, from his testimony I did not get any indication that the accidents were any way in this study related to age.

I did not get that from his testimony this morning.

Mr. BLAGG. Let us talk about physical fitness.

Mr. CALHOON. Physical fitness has been around this industry for many, many years.

We have had several attempts to put in the so-called Coast Guard profile system.

Any company has the right to reject anybody they do not think is physically fit.

We have jointly administered diagnostic centers where a man must take a biannual physical, and it is a real in-depth physical.

Mr. BLAGG. A man must take what?

Mr. CALHOON. Take a biannual physical.

Then, he is examined every time he is reemployed.

That is what they call a preemployment examination.

The man knows what his physical conditions are. He is given this report in writing.

I think there is no problem in this industry, at least with the marine engineers, on their physical fitness.

Now, when we start talking about standards, the standards that would be recommended to us would be the standards, old standards, that the Marine Corps had for enlistment.

Mr. BIAGGI. Well, that is speculation.

Mr. CALHOON. Now, why do they want standards?

They want to push the middle age and the older employees out of this industry to make room for this overgraduation of young engineers.

Mr. BIAGGI. That proposal has no sympathy here, I can assure you.

Mr. CALHOON. We have had many physical standards. We have had many, many meetings with the industry.

One physical standard which is not a high medical terminology is: Does the man have the ability to do the job? That is what the doctor determines: if he does have the ability to do the job and does not have a contagious or communicable disease.

That is the only three things he looks at.

Mr. BIAGGI. Let us get back to the physical examination that you gave biannually, as stated in our your statement.

As a result of those people have been precluded from employment?

Mr. CALHOON. Some have been precluded from employment until they took some corrective medical attention or some corrective surgery.

It is usually not a matter of putting the guy out of employment.

When he knows he has a serious medical problem, he wants to take care of it.

Some of the things that have come out of running these clinics is that we have found that practically every engineer is deaf in certain decimal ranges.

So, that we have learned.

We are now in the process of having a study done because we have evidence that there is a problem of asbestosis in the engine room of ships.

One clinic showed a 1.3-percent infestation with asbestosis of the people they examined.

So, we are doing some studies on that.

We have spoken to the Maritime Administration and we have spoken to the U.S. Coast Guard on this problem.

Mr. BIAGGI. Before, I guess, the more germane question that is my concern, I would like to make the same comment that the chairman, Mrs. Sullivan, made in connection with page 18, the listing, which you characterize as an antilabor provision.

I concern myself with the gentlelady's remarks in that there was no intention of having this list utilized in any antilabor activity.

Whether this provision stays in the bill or not, I can assure you that the point you raise will be dealt with.

I am sure that my colleagues on the committee will make their own feelings known.

One other item: Do you have any evidence of any Federal or State schools denying the application of a black or Hispanic because of their race or ethnic origin?

Mr. CALHOON. I have no knowledge of anything on their application.

All I know is they did a terrible job.

Mr. BIAGGI. No.

We are raising the point because we are sensitive to that and we would like to know if there is any evidence of that practice of denial of opportunity in existence.

If there is, we want to deal with it.

Mr. CALHOON. Well, I will tell you, Mr. Congressman, it has been one of the things that has genuinely concerned me.

The percentages of blacks or minority officers is very, very low. Until we started a training program of our own there was very little we could do about it.

Since we have had our own training program, we have had a very definitive program to recruit.

But, we have always been concerned with the affirmative action program of OEO, if they came in and said you must fill these jobs with minorities, because they are just not around.

That is one thing that has concerned us.

Mr. BAGGI. What is the tuition in your school, Mr. Calhoon?

Mr. CALHOON. No tuition.

Mr. BAGGI. We had testimony earlier that tuition ranged anywhere from \$1,800 to \$4,000 in the State schools. That could easily be the reason why we do not have as many minorities in the schools as you have in yours.

You should be commended for the school and its operation, but I do not agree with your apparent presentations that it is the alpha-omega.

I think it is logical to conclude after you made your statement, that it is very forceful and very clear as far as your intent is concerned, which leads me to this next question.

Before that question, do you have facts that would sustain your statement where you said it would cost \$400,000?

Mr. CALHOON. Yes, sir.

The fact came from a very simple computation.

In your ad hoc committee, which we attached as an exhibit as table 9, you showed Federal costs of \$13,680,000, the total cost being \$27,088,000. That is the number we start with.

Then we take for that same year the number of graduates and we apply the 23-percent figure shown in table 6 who go to sea as a career.

Twenty-three percent of that number became 125 graduates.

One hundred twenty five graduates divided into that figure gives you the figure in excess of \$200,000.

Mr. DOWNING. Will the gentleman yield for 1 minute?

Mr. BAGGI. Yes.

Mr. DOWNING. You are including in that the cost of plant facilities and the ship and everything else; are you not?

Mr. CALHOON. The \$100,000 figure does not include the cost of plant facilities. If those costs plus other Federal subsidies were included, the cost per active graduate would be around \$400,000.

Mr. DOWNING. Well, I do not really think the facilities should properly be added in.

Thank you.

Mr. BAGGI. Now, as I said before, the very direct criticism of the school leads to one question, criticism sustained by your facts.

Do you recommend an elimination of the State schools?

Mr. CALHOON. Yes, sir.

Mr. BAGGI. Now, given realities, having the State schools, we have 3,000 some odd students therein who really do not come from affluent families.

You testified middle income.

Other people said low middle income.

It depends upon where you would like to fix that in the way of the salary scale.

I do not regard middle income people today as affluent anymore in light of inflation and the cost of education generally.

We have some 3,000 students in the academies that are paying tuition at the aforementioned rates and receiving \$600 in subsidies.

That \$600 did not include just the uniform and compensation for the lack of ability to go to work.

It also included cost of books and tuition assistance.

In light of that and many years of no inquiries, that figure remained static despite the inflationary trend. Your members have suffered the effects of inflation; but by virtue of your organization, they have been able to deal with it. There has been substantial increases in pay during that spiraling period and right fully so.

How can you, in light of all this, oppose increasing the subsidy from \$600 to \$1,200, which really does not represent any monumental figure?

You are dealing with young people from families who have their problems in economics, such as your members have.

You may have some of your members' children there. I do not know, but they could be.

How can you justify opposing an increase of that subsidy?

I would like to isolate that issue from your total presentation because I understand you have an opposition to the total State school situation, but let us, given all of that, let us talk in terms of 3,000 students in school who could use that extra few dollars.

Mr. CALHOON. Well, my son is in the University of Chicago in political science. I would like for the Government to pay his tuition, or for his clothes.

I am not opposed to financing education, but let us finance it for everybody right across the board. That would be fine to me.

It would save me a hell of a lot of money.

I have a kid that has been in school and he is 29-years old and he's still in school.

Mr. BRAGG. I understand that.

I have a few myself.

Mr. CALHOON. But, to train and keep training and keep training more and more engineers when there are no jobs for them is a crime and a shame.

Mr. BRAGG. That is not the issue, Mr. Calhoon.

That is one, by the way, which you made a rather forceful case on.

Mr. CALHOON. If you are giving additional subsidy, turn the schools around and turn them into medical colleges.

God knows, this country needs doctors.

I would then be here supporting it. I would be here supporting the whole Federal Government paying the whole cost. Pay it where there is a need.

Mr. BRAGG. Your presentation this morning, Mr. Calhoon, I want you to know, raised that very serious question and some of my colleagues in the committee were discussing it, as to whether or not we are not producing too many people.

But, that would be worthy of another hearing.

The precise answer I want at this point is a response to my very narrow question.

How can you justify not assisting the students that are there now?

Do not blame the students for the institution or the administration policy.

Given all of that, which may be subject to attacks and later review, but given all that, can you not see in your heart to support a little extra money for this?

Mr. CALHOON. No, sir.

Mr. BIAGGI. You are a tough man, Mr. Calhoon.

Mr. CALHOON. It is wrong. It is wrong. It is wrong.

Mr. DOWNING. Mr. Ashley.

Mr. ASHLEY. I do not know how tough Mr. Calhoon is or if he is so tough at all.

Maybe he is really concerned about holding out false hope to a number of youngsters who go to these academies with the expectation that there will be jobs at the end of the line, in which case he is not tough at all, in my view.

I must say that your testimony does amount to a rather full scale indictment of the State and Federal maritime academies and it seems to me that if the facts support your testimony, then the responsibility as far as this subcommittee and the full committee are concerned is clear.

On page 3 of your statement you state that: "As of October 1, 1975, the academies were training 3,287 students. As of that same date, there were only 6,484 licensed shipboard jobs."

What you are saying, then, is that every 8 years accumulative, there are enough graduates from the maritime academies to replace at least the current number of licensed shipboard officers; is that not right?

Mr. CALHOON. Yes, sir.

Mr. ASHLEY. But, we know that these jobs are not filled solely by maritime academy graduates. It is quite the contrary. Something in the neighborhood of 80 percent are filled by men who have not attended the academies.

Is that correct, sir?

Mr. CALHOON. That is correct, Mr. Congressman, and that, in my opinion, is very wrong.

Mr. ASHLEY. Is this some kind of unfair competition which favors men who have come through the ranks, as it were, over those who have gone to academies?

Is this what is reflected in this data that you present with respect now to the mathematics of 80 percent roughly of shipboard jobs being represented by nonacademy graduates?

Mr. CALHOON. Up until 1974 there was no problem. The problem emerged when the Coast Guard put in their new license examination.

The Coast Guard disagrees with me on this subject.

But, in my opinion, the license examination that went in in 1974 was geared to an academy graduate.

Mr. ASHLEY. Was geared to what?

Mr. CALHOON. Was geared to an academy graduate and it is going to be virtually impossible for a non-college-engineering student or an

academy graduate to pass the Coast Guard examination and work his way up and climb that economic ladder.

That has been a great job opportunity, social opportunity, for people in this industry for many, many years.

We are studying that problem and we are watching it very closely.

In the figures that the Coast Guard presented to this committee, I think it was 14 out of 92 that took the test in the field. That is a very low number taking the test last year.

That is a very low number taking the test last year.

I suspect this examination scared off some potential people that would have taken the test.

Mr. ASHLEY. Let me ask you this: You say there was no problem until the Coast Guard changed the examination.

But, my question was: Has there been prior to 1975 some kind of an unfair preference given to the nonmaritime academy graduates over the graduates, and how do we account for the fact that only some 20 percent of the 6400 jobs are manned by Academy graduates?

Mr. CALHOON. Well, I think the best description of that, Mr. Congressman, is table 7-A and these tables reflect the situation when we had 50,000 or more troops in Vietnam.

In the first line you will see, and discard 1965 because the Academy graduates roughly in the middle of the year, but you see in 1966, 17,947 man-days was worked on MEBA contract vessels by Academy graduates that graduated in 1965.

But, by 1967 that was down to 11,000.

So, the attrition rate of the Academy graduates is just terrible.

I think that is a terrible figure when they were trained by the government basically for times of national emergency.

They come out of the academies, get on the ship, do not even stay for the 5 years, which they allegedly have the moral obligation to stay for, no legal obligation, but a moral obligation.

Mr. ASHLEY. Well, I think another area of importance relates to what you say on the bottom of page 4, top of page 5 of your testimony, where you state that in the last 5 years alone the decline in the size of the U.S.-flag vessel has been nearly 30 percent.

You go on to say: MARAD tells us that the decline will be reversed by the end of 1977 so that by 1985 the fleet size will have increased by more than 12 percent over 1974 levels.

Based on this faulty assumption, MARAD goes on to predict an acute officer shortage by the end of this decade.

Why do you say this assumption is faulty, Mr. Calhoon?

Mr. CALHOON. Well, we disagree with some of their projections.

We think it is a very difficult problem to project at all about what the future of industry is going to be.

There are too many imponderables.

Mr. ASHLEY. You mean these listed in the third paragraph?

Mr. CALHOON. Yes.

Right now, they are off 30 percent on that projection.

Mr. ASHLEY. What you are saying is that this assumption was based on answers to the questions that you have raised at the bottom of page 5 that they have responded to in the most favorable kind of light?

Would that be accurate?

Mr. CALHOON. Yes.

Mr. ASHLEY. Is that your understanding of the situation?

Mr. CALHOON. Yes, sir.

Mr. ASHLEY. On page 7 you point out that there is no legal obligation to go to sea, but instructors at the Academy deprecate seagoing as a career and promote onshore jobs as having more status.

Is there justification for maritime academy training for onshore as well as seagoing jobs, in your opinion?

Mr. CALHOON. No, sir.

Mr. ASHLEY. There is not?

Mr. CALHOON. No, sir.

There are plenty of business colleges that take care of the executives of any industry.

Mr. ASHLEY. Do you have any knowledge as to how many onshore jobs are filled by Academy graduates indirectly related to maritime operations?

Mr. CALHOON. No, sir.

Mr. ASHLEY. Maybe your associate does?

Mr. CALHOON. We do something bearing on that.

This is an old study done by the Department of Commerce back in the fifties and they indicate that of all the Academy graduates in this survey, that 23 percent of the jobs on the ships were filled by Academy graduates.

Mr. ASHLEY. That was in the 1950's?

Mr. CALHOON. That is right, and onshore maritime related industry, 13.6 and active duty in the military was 19.18 giving a grand total of 55.86.

Mr. ASHLEY. Was that the MARAD survey that you referred to at the bottom of page 9?

Mr. CALHOON. Yes, sir.

Mr. ASHLEY. I take it there is no later data available. Is that correct?

Mr. CALHOON. As far as we know, Mr. Congressman.

Mr. ASHLEY. Well, Mr. Chairman, I think if that is the best data that is available to Mr. Calhoon, we certainly cannot blame him for basing his testimony in part on such data, but it seems to me that data is sorely in need of being updated somehow.

Mr. DOWNSING. Counsel will direct inquiries for more recent studies.

Mr. ASHLEY. I have just a couple of more questions, if I might very quickly ask them, Mr. Chairman.

You say on page 10 MEBA is also aware of a Coast Guard report which shows that more than 83 percent of the officers in the merchant marine come from nonmaritime academy sources. When was this report made?

Mr. CALHOON. This report came in our possession about 6 weeks ago and it is supposed to be a survey done by the Coast Guard on 200 ships currently or recently.

Mr. ASHLEY. If you could supply for the record the date of that report or if you have it available, we would appreciate it.

I just want to find out what time period was involved, whether that goes back to the sixties.

Mr. CALHOON. No, sir. This is current.

Mr. ASHLEY. For my own edification, on page 12 you say: By 1980 predictions have been made that 4 billion cubic feet per day of liquid natural gas will be coming into this country by tanker.

In a little more than a year from now, at least one-fourth of that level will be coming into Maryland from Algeria.

None of the academies has yet to train a single graduate who is ready to work aboard the new LNG ship.

Is special training desirable? Is it necessary for this type of vessel, Mr. Calhoun?

Mr. CALHOON. Yes, sir.

Mr. ASHLEY. No question about that?

Mr. CALHOON. It is absolutely required and I would think the Coast Guard will issue an endorsement on a license and give some type of examination for this type of vessel.

It is a very dangerous vessel.

Mr. ASHLEY. What you are saying is that the Academy graduates, absent some kind of special training, would not qualify for the jobs that may be involved aboard such ships?

Mr. CALHOON. That is correct.

Mr. ASHLEY. Who finances your school?

Mr. CALHOON. The maritime industry.

I would like to go into some detail on that because there seems to be some kind of misunderstanding on Federal money.

As I testified this morning, we were absolutely against receiving any Federal money in our school because we were convinced the Federal government may do a lot of things right, but in maritime training they know how to do everything wrong, and we did not want to get entangled in it.

When we negotiated our contract, and I believe the year was 1955, that established a training program in the industry. We set "x" number cents aside per day for training. This "x" cents per day came out of our economic package and at that point in history there was no subsidy on training.

The Maritime Subsidy Board had previously turned down Delta Lines and Bloomfield Steamship Co. for contributing to a training fund of one group of unlicensed personnel.

The employers fully understood there was no Federal subsidy.

We fully understood there was no Federal subsidy.

It is my honest belief, and I may be in error, but it is my honest belief that we, at this point, have not spent one dime of Federal money.

Subsequent to this 1963 or 1964 rule, all the subsidized companies got together and sued the Federal Government to collect because they said that under the act of 1936 it was payable.

Then, table S is, I thought, rather interesting because what it seems to show is that the number of enrollees in the MEBA school and the number graduated is related in a direct way to the number of ships sailing and number of jobs available, and I understood your testimony to be that this is the case.

Mr. CALHOON. That is correct.

Mr. SARBANES. You have, when faced with a worsening employment situation, cut back on the number of enrollees at your school, and therefore cut back on the number of people you graduate to seek these shipboard jobs; is that correct?

Mr. CALHOON. That is correct, Mr. Congressman.

Mr. SARBANES. Now, did I understand you to say that you have cut it back to the lowest level that is consistent with maintaining the school as a functioning educational institution according to the opinion of some experts?

Did you say that this morning or something of that sort?

Mr. CALHOON. Yes, sir, and with the potential to expand in the case of a national emergency.

Mr. SARBANES. Mr. Chairman, we ought to contrast that policy with what seems to be the enrollment policy at the State maritime academies.

At least as I try to trace those figures, they seem to make no adjustments with respect to the employment situation, but seem to maintain a constant or even an increasing enrollment in the face of the worsening employment situation.

Mr. DOWLING. Mr. Sarbanes, Mr. Calhoun's answer to that, if I recall, was they were told by MARAD that they had predicted to give up more officers in 1972, something like that, when their predictions were off.

But, in the meantime, the academies had started to gear up.

Mr. SARBANES. Well, they never geared back, as I understood it, at any point.

Was your school founded initially in order to meet a pressing demand for additional officers?

Mr. CALHOON. It was founded initially to meet the demand for officers during the Vietnam sealift and simultaneously a pressing demand for retraining the current work force in the new technologies, the automation, the instrumentation, the pneumatics and hydraulics of the new vessels.

We had previously tried to contract this with the Federal and State academies that had facilities for students and we had really been given an insulting turnaway.

The New York State Maritime Academy was very insulting.

Kings Point, after entering into negotiation and coming to an agreement, after we came to an agreement on the figures where there was a six-man committee, three from the union and three from the industry, when we went to Kings Point to execute the agreement, we got to Kings Point and we were told by Admiral McIntosh that he was very sorry he could not execute the agreement, that he had orders that there would be no union training in that facility.

So, we left.

Mr. SARBANES. Mr. McCloskey, this morning, sought to make I think, a point out of table 10, of the ad hoc committee's recommendations, particularly a footnote therein, about industry contribution, footnote 3.

But I understood you to say just a moment ago in answering a question from Mr. Ashley, that the contributions to the training fund of your association come, I think you said, come primarily from non-subsidized operators rather than subsidized operators.

Is that correct?

Mr. CALHOON. Yes, sir.

Mr. SARBANES. Therefore, with respect to the nonsubsidized operators, there is no argument whatever that can be made that there is any Federal subsidy, direct or indirect.

Mr. CALHOON. That is correct.

Mr. SARBANES. Do you have any idea of about how much the training fund amounts to, the total?

Mr. CALHOON. We have liquid assets of about \$10 million.

Mr. SARBANES. Not your assets. The contributions.

This says contributed to the training fund.

Mr. CALHOON. You mean annually?

Mr. SARBANES. Yes.

Mr. CALHOON. About \$4 million.

Mr. SARBANES. About \$4 million?

Mr. CALHOON. Yes, sir.

Mr. SARBANES. Of which, according to the footnote, subsidized operators in fiscal 1973 gave \$565,000 and fiscal 1974, \$598,000, only a portion of which received the subsidy pursuant to the court decision we were talking about.

Mr. ASHLEY. The contributions had gone to the support?

Mr. CALHOON. The contributions had gone to the support of training programs.

Mr. ASHLEY. Right.

Mr. CALHOON. That they thought were subsidized.

The courts upheld it.

My understanding is that this summer sometime a special appropriation was put through the Congress by the Justice Department and the Justice Department paid the subsidized steamship companies their subsidy on at least some portion of their training contribution.

But, when we set the program up, we knew it was not being funded by Government money.

We did not want any Government money.

About two-thirds of the companies that contributed into the school are not on operating differential subsidies.

Mr. ASHLEY. Finally, Mr. Chairman, if I may.

You suggested in your testimony that Gulf or one of the majors has instituted a special training program.

Do you know of any others that have done so?

Mr. CALHOON. No, sir.

Not this type of training. I have known where they have instituted special training programs for specific new items or specific new types of ships but to train for an initial licensing into the merchant marine; no, I do not know of any.

Mr. ASHLEY. That is what Gulf is doing?

Mr. CALHOON. Yes, sir.

Mr. ASHLEY. Why do they not use your facility?

Mr. CALHOON. Because Gulf does not have a union contract for its mates and engineers and I would think it would be an infiltration. If they did use our facility I would hope there would be an infiltration and election.

Mr. ASHLEY. I see.

I can see by your testimony that what Gulf did was to contract with the Southern Main Vocational Institute for the training of licensed deck officers through a 3-year program.

Mr. CALHOON. Yes, sir.

Mr. ASHLEY. Well, that is of considerable interest, that they would contract for a program separate from the programs being offered by the State and the Federal Maritime Academies.

Mr. BIGGAR. Will the gentleman yield?

Mr. ASHLEY. Yes.

Mr. BIAGGI. I wonder if the Chairman would make inquiry of Gulf to give us their reason.

Mr. ASHLEY. I think that is appropriate because Mr. Calhoun draws a conclusion from that which should certainly be subject to revocation by the Gulf people.

It would be interesting to have testimony, if there be such, on the other side of the issue.

Mr. DOWNING. That is an excellent suggestion.

Mr. ASHLEY. Mr. Chairman, that is all I have.

I want to thank you, Mr. Calhoun, for your testimony.

This is good testimony. There are a lot of allegations, statements of fact, subsequent to determining whether or not they are indeed fact. If they are, I think this has been a very, very constructive session and a good job on your part.

Mr. CALHOUN. Thank you, Mr. Congressman.

Mr. DOWNING. Mr. Sarbanes.

Mr. SARBANES. Thank you, Mr. Chairman.

Mr. Calhoun, I think you have done us a service by answering some very pointed questions and by raising some very fundamental considerations as to what the purpose of this program is and where we are going.

I was particularly interested in a couple of your tables, really table 1 and table 2.

Unfortunately, you do not do them year by year and I would ask if that might be possible.

Table 1 shows that we have gone from 13,081 deck and engine ship-board jobs in 1964 to 6,484 in 1975.

Table 2, of course, shows the number of ships in the U.S.-flag fleet in selected years.

So, the subsidy amounts to about 10 percent of the annual contribution to the training fund.

Mr. CALHOUN. Yes, sir, and I contend, Mr. Congressman, that that is not a contribution from the Federal Government to the training fund.

Mr. SARBANES. I understand that.

But, Mr. McCloskey and Mr. Biaggi, this morning, were trying to establish an indirect chain that runs from the fact that the subsidized operators make a contribution to the training fund and they, in turn, turn around and seek to include those costs as part of the cost to which they are entitled to a subsidy.

But, I think it is important to go through the sequence we have just been through in order to establish the point, and I understand you do not accept the indirect chain, but even accepting this indirect connection, the contribution figure is about 10 percent.

Mr. CALHOUN. That is correct.

Mr. SARBANES. Not as this footnote gives the impression, in my opinion, in a highly erroneous way of 72 percent.

The 72 percent is the percentage of the contribution made by subsidized operators to the training fund, on which they then turn around and claim a subsidy from the Government.

Even on that assumption the subsidy running to the training fund is at 10 percent, and want to contrast that figure with those cited in these tables for the other schools.

Of course, your position is and as far as you are concerned, when you set the school up, it was to be without any Federal funds and that is the way you have operated.

Mr. CALHOON. That is right, and the money could have well gone into the man's paycheck, it could have gone into his pension, it could have gone into his vacation, and if we would disband the training program today, that is where precisely it would go because it was part of a total economic package that we negotiated.

Mr. SARBANES. Why was it necessary for you to start a school in 1966 to meet the needs of the Vietnam sealift instead of these academies that were receiving Federal payment, expanding their own enrollment and responding to that need?

Mr. CALHOON. They were just not meeting the need while Vietnam was going on and this is one of the studies we were anticipating doing for this committee.

We wanted to show during the years of Vietnam how many maritime academy graduates left the industry and stopped sailing.

They are readily available. We could get the figures of who was sailing and then we could figure out who stopped sailing in those years, who did not finish his moral obligation.

That we did not get completed.

Mr. SARBANES. The other part of your testimony that is especially interesting is the qualitative side. We have just been talking about the quantitative problem. In other words, you have a limited number of jobs and you are producing so many people to fill them. In addition you have the question of the quality of the training. To my mind, it may well tie in with some of the testimony we heard this morning about our safety record. I understand your testimony to be a very strong assertion that the training being given at the academies falls short of the training that you provide and, in any event, is not up to the standard in terms of skill that ought to be required for manning these ships.

Mr. CALHOON. That is correct.

Mr. SARBANES. That is a pretty strong indictment, of course, of the education which is being given at the academies.

Mr. CALHOON. I said, Mr. Congressman, you start a training program to train ship officers and you have a certain time span to do that training in and then you go to accreditation and go to the Board and he tells you what you have to put into your courses to meet the requirements whatever accreditation board you want to get accredited with.

So, it makes a compromise.

You are not turning out a good liberal arts student or you are not turning out a good nautical student. You have so much time to train him and you have to compromise those two objectives.

There is no question in our mind that the examination results by the Coast Guard under the new examination show that the academies are not teaching that technology.

It is not an exam briefer.

A few years ago at the New York State Maritime Academy in the old essay type exam practically the whole class failed.

I was talking to the officer in charge of marine inspection, Coast Guard, who was sent to New York on an investigation—he and two other officers—to find out what went wrong.

There was a lot of pressure put on the Coast Guard. If the examination was too hard it would discriminate against the New York State Maritime Academy.

He said, "You know, I could have written my report before I left my office."

The truth of the matter is that they had stripped maritime training out of the course of instruction.

The outcome of this investigation was to allow New York State Maritime Academy to take their license examination in January and then they graduate and take their bachelor's degree in December.

They are just wholly deficient.

The old examination in the U.S. Coast Guard was really an archaic examination. It had not been kept up.

When they went from that examination to the new examination on the new technology, the academies had not just geared up, except for California Maritime Academy, which had geared up.

But, again, I say, look at the record.

California Maritime has not become an accredited one yet.

They are just in that phase and have just asked for accreditation.

Compare California's grades with the other accredited academies.

As soon as the accreditation comes it strips the guts out of the maritime teaching.

Mr. SARBANES. Thank you, Mr. Chairman.

Mr. DOWNING. Mr. Zeferetti.

Mr. ZEFFERETTI. Thank you, Mr. Chairman.

We have heard an awful lot of questions and I appreciate the testimony because to me it is somewhat educational at the same time.

I would like to ask you the same question I asked Captain Johnson a little bit earlier.

I want to know if you have any thoughts as to without the prospects of getting a job, without the job market even being there, what the incentive is for these young people and now even ladies?

Is it free education?

Are we opening up a new process of free education for that person or is it, in fact, dedicated people looking toward a career and have not had the opportunity to take advantage of one?

Mr. CALHOON. No.

I think if you will look at appendix C, which is a press release put out by the California Maritime Academy, I think they lie. They lie to these kids. To keep those buildings full, they lie to them.

It says right here that everybody is going to get a job in the maritime industry.

It says there were three job requests for each applicant.

It says members of last year's graduating class had two to three job offers to choose from and some 98 percent of the class was employed in less than 1 month after graduation from the 4-year course of study.

It is a cruel hoax on these kids to tell them there are jobs available to get them into a college, to keep them there 4 years, and they wind up finding out the facts of life, that there were no jobs available, that there have not been any jobs available in the 4 years, and there will be no jobs available when they graduate.

It is really a beautiful way to turn the young people of this country off against the system.

Mr. BRAGGI. Will the gentleman yield?

Mr. ZEFFERETTI. Yes.

Mr. Biaggi. In connection with that, when you say there are not any jobs available, are you talking about the seagoing jobs or all related industry jobs?

Mr. Calhoun. I am talking about seagoing jobs.

Mr. Biaggi. We have had testimony from Admiral Rizza from California saying he has had no problem getting his graduates seagoing jobs.

We have had further testimony that most of the graduates do become employed, not in seagoing jobs, in good related maritime jobs.

So, I do not know if that advertisement is entirely misleading.

If they advertised and said that there were seagoing jobs, then it is inaccurate.

But, they are talking about the graduates being offered jobs and offered jobs, period, that is, in fact, happening.

The question is: Is that why the Maritime Academies were constituted or was it for the purpose of providing officers or personnel for the ship?

I think that is the question.

Mr. Calhoun. I think it was clear that it is for training and licensing of officers.

Now, when they say maritime related, it is pretty broad.

What is maritime related?

What is their definition?

I am sure every single one of them on his job drinks water. Does that make it related to maritime?

Mr. Sarbanes. I just want to follow upon this.

This is a very carefully done press release.

What is said is that members of last year's graduating class had two to three job offers to choose from and some 98 percent of the class were employed in less than a month after graduation.

Most of these high-paying jobs center around careers at sea aboard American-flag ships.

Now, that is very carefully done.

If I were a young fellow reading it, I would assume most of these high-paying jobs center around careers at sea aboard American flag-ships and I was going to get a job at sea.

That is not what it says.

It says "centers around". Obviously, there are a great many shoreside jobs that center around careers at sea.

It is very carefully done article.

Mr. Zeffertti. Mr. Calhoun, would you advocate some sort of a commitment at the end of a graduation where possibly the Navy would accept putting a specific amount of time into Navy service?

Mr. Calhoun. I have no objection to it.

Mr. Zeffertti. Do you think that that might be a way of keeping track and keeping hold of graduates, so in case of actual emergency that we would have means of utilizing these young people?

Mr. Calhoun. Well, when you say use them in case of a national emergency, if they are in the Naval Reserve they are going to be used in the Navy in the case of a national emergency.

They are not going to be used in the Merchant Marine.

I do not know. I really do not know how you set up a procedure to make them available to the Merchant Marine in the case of a national emergency.

I do know that it is really a tongue-in-cheek operation with the academics because in case of a national emergency, if a graduate was not making himself available to the maritime industry, they should not give his transcript to a graduate school so he can go on to graduate school.

I know when he applies for a Federal job that there should be a regulation that he could never work in a Federal job because he has violated his word to the Federal Government.

Mr. ZEFERETTI. Do you know what concerns me a little bit is how we keep track of all these young people.

If, in fact, they are graduating, where are they going?

Are they going to work in private industry? Is that where they are going?

Mr. CALHOON. I know where some of them are.

They are on the minority counsel staff.

Mr. ZEFERETTI. What I am trying to say, is if they are gone, if they graduated and they are gone, how do we know who they are, where they are, when the time comes, if we need them?

Mr. CALHOON. I do not know.

Mr. ZEFERETTI. I know you are opposed to keeping some sort of a listing under that title, under the one section of the bill, but how do we keep track of these people in order to utilize them in case of an emergency?

Mr. CALHOON. I just do not know.

Last year you passed that pension reform act and it sets vesting standards.

So, a man becomes vested in any pension fund now and if he quits the company or the industry, how does that pension plan know where he is?

You have to set money aside for his vested benefit.

How long do you have to keep it?

When Congress starts saying find somebody, I do not know how to do it.

It is a problem that is disturbing every pension plan in the country.

Mr. ZEFERETTI. My last question relates to the curriculum in the academics.

You said in your testimony that some 46 percent of the academy associates made the licensing, passed the licensing exam, and 86 were yours.

Mr. CALHOON. No.

The first year was 70.

Mr. ZEFERETTI. 70.

Evidently there is some qualitative difference there in the kind of education they are getting, if, in fact, such a low figure is passing through.

I wonder, Mr. Chairman, since there has been some sworn accusations made here as far as what kind of education they are getting, I wonder if there is some way we could make some sort of comparison if, in fact, they are not teaching the latest methods, as Mr. Calhoon has indicated, with LNG and the like?

Mr. DOWNING. I have been thinking about that, too, Mr. Zeferetti.

I was told that most of the input into the examination came from MEBA instructors.

Mr. CALHOON. No, sir.

That is not true.

I do not think we had any input.

We had several meetings. We worked with the Coast Guard.

Mr. DOWNING. Well, it was not your fault.

I am told that the industry and all the academies had input into this examination.

Mr. CALHOON. We had some input.

Mr. ZEFFERETTI. I am finished.

Thank you very much.

Mr. DOWNING. Mr. Calhoun, I have a few questions.

You have been extremely patient.

During the war when there was a shortage of officers they created the officer candidates.

Mr. CALHOON. Yes.

Mr. DOWNING. And in 60 days put these people through a rigid course.

Mr. CALHOON. 120 days.

Mr. DOWNING. 120 days.

Now, that was to supplement the academy which gave the cadet a 4-year well-rounded education, including military education.

Do you see any parallel here between MEBA and the State National Academy?

Mr. CALHOON. No, sir.

The only academy I was familiar with at that time was Kings Point and it was not a 4-year school. It was an 18-month school.

The total curriculum was 18 months.

Those schools did a tremendous job during World War II. We are geared up to go in the same type operation and we may have to go in the same type operation for the unlicensed personnel because, obviously, they are not passing the examination anymore, and I do not think we should run an industry where 16 percent gets 100 percent of the Government support and 83 percent gets zero.

So, we are seriously considering setting up a school for the unlicensed so that they can pass the licensing examination.

But, it will take at least as long as those courses did during the war.

Mr. DOWNING. In the old days, when you graduated West Point, you were automatically an officer and a gentleman.

Was the same true when you graduated from Kings Point?

Mr. CALHOON. On which point are you asking?

Mr. DOWNING. One final question, Mr. Calhoun.

A group of cadets from Fort Schuyler had presented what I think is a very excellent statement and they ask this question.

This will be my last question: Because of manipulative rules favoring MEBA school students, cadets of the Federal and State academies are limited to employment by the non-union oil companies' ships and American Export Lines.

Employment in other U.S.-flag vessels is limited to class 2 MEBA members.

Somehow MEBA school graduates obtain this privilege whereas Federal and State academy cadets must wait for such a distinction.

Hence, we feel our ability to fulfill our desire to serve the maritime industry as licensed officers on its flagships is severely limited by discriminatory practices by the union.

If unions question why some of us do not "ship out," perhaps they should ask themselves why they do not give us a chance.

Mr. CALHOON. You would like me to address myself to that?

Mr. DOWNING. Yes, if you would address yourself briefly.

Mr. CALHOON. First, we are different from them in our hiring procedures.

We are similar to the Seafarers, the National Maritime Union, the Sailors Union, in that we have a nondiscriminatory hiring hall that has nothing to do with union membership.

We have members. We have people that are not members that have the highest seniority rate and they get the preference. We have some of those.

The preference in the hiring hall is strictly a seniority system based on your seniority and is broken into three groups, not as somebody previously testified, four groups.

The move into group two takes 365 days experience on an American-flag ship, equal for every person, whether he be unlicensed, State academy, Federal academy, or our academy.

The move from group two to group one is based on seniority. When the job openings come up, it is the first come, first served, and group two moves to group one.

Mr. DOWNING. You claim you are not discriminating?

Mr. CALHOON. Absolutely nondiscriminatory.

We just went through a long and intensive court case last year—not a court case, but NLRB case, where the charge was filed by the labor relations instructor at the California Maritime Academy.

For the last 15 years, he has been an instructor at the California Maritime Academy, but comes down to the union hall because he has this top line seniority and he moonlights on the weekend to keep his graduates from getting a job.

After extensive hearings where it cost this union a lot of money, the National Labor Relations Board ruled in our favor.

Mr. DOWNING. Thank you very much, Mr. Calhoon.

In relation to the minority counsel to whom you referred, he is not a graduate of a State academy or the Federal academy. He is a graduate of the Coast Guard Academy.

Mr. CALHOON. Yes, but there are two more that are.

Mr. DOWNING. That is all, Mr. Calhoon.

Thank you very much.

Mr. CALHOON. Thank you.

Mr. DOWNING. That will conclude today's hearing.

[The following material was submitted for inclusion in the printed record:]

STATEMENT OF HON. OLIN E. TEAGUE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

The Texas Maritime Academy, an academic division of the Moody College of Marine Sciences and Maritime Resources of Texas A&M University, is the only Maritime Academy on the Gulf Coast. It is fully accredited, and its graduates hold positions of leadership and responsibility, both afloat and ashore throughout the marine industries. Passage of HR 10413 is strongly endorsed by the Texas Maritime Academy and its parent college and is on record to this effect through

the Statement of Superintendents of the State Maritime Academies Before the Sub-Committee on Merchant Marine of the House Committee on Merchant Marine Fisheries on December 3, 1975. In this statement, some changes to HR 10413 were recommended, and it is believed that restatement and clarification concerning these changes may be useful.

In Section 2 of the subject bill, it is stated "... and that sufficient flexibility to fulfill short-term emergency requirements for such officers should be maintained by schools other than the United States Merchant Marine Academy and the State maritime academies." The implication of this statement is that the union schools are better qualified to fulfill short-term emergency requirements for the U.S. flag fleet; and, as pointed out in the joint Statement of the Superintendents, history does not support that implication, and it is recommended that the above statement be struck from the bill.

In Section 4(C), the bill addresses itself to the situation where funding in a given fiscal year is not adequate to provide payment to all eligible students. Under such circumstances, the Secretary would be authorized to reapportion appropriated funds according to the enrollment of the various academies at the end of the 1975 academic year. The Statement of the Superintendents points out that each academy has a unique problem with regard to enrollments, and this is particularly true for the Texas Maritime Academy. For example, Texas Maritime Academy has only 35 subsidies per year authorized for it, and, consequently, meets the condition each year of insufficient funding to provide payments to all eligible students. However, reapportionment based on enrollment at the end of the 1975 academic year or any other one specific time can only lead to greater inequities. This is amply illustrated by the fact that the current subsidy imbalance results from assignments based on 1965 enrollments. It is suggested that this section of HR 10413 be rewritten to permit reapportionment according to the determined judgment of the Secretary as to the best satisfaction of educational objectives of the Maritime Administration.

There are two points not covered in HR 10413 that were addressed in the Statement of the Superintendents, and they are of sufficient importance that they bear repetition here. The first of these concerns the recommendation that the naval fuel stocks of the United States be made available to the academies for supporting the at-sea training aboard the school ships. The costs of fuel oil have increased by a factor of 3 or more in recent years and have reached a level where it will soon become mandatory for the academies to curtail their seagoing training unless assistance for fuel acquisition is provided. The inevitable result of limiting the at-sea training will be a reduction in efficiency of the graduates, and this must be avoided. Currently, the various States bear all of the operating costs of the training cruises, as well as the fuel costs, and it is recommended that HR 10413 be amended to authorize the Maritime Administration to provide the fuel requirements for the school ship cruises.

The Statement of the Superintendents also addresses itself to the problem of employment opportunities being limited by various union contracts and offers the following amendment to rectify this problem:

"It is the intent of Congress that all newly licensed officers whose education and training has been subsidized either directly or indirectly by Federal funds, shall be given equal opportunity and status for admission to employment, including admission to membership in any union enjoying contractual relations with operating companies, whether or not those companies receive Federal operating subsidies, or do not have exclusive union hiring agreements."

I strongly support the proposed amendment to HR 10413 for the reasons cited in the Statement of the Superintendents and because of my conviction that the aspirations, indeed the requirement, for this nation to once again become a major maritime power cannot be served by any privileged group whose organizational rules would prohibit employment of qualified officers in the U.S. flag fleet by denying them membership on a union because they did not receive their education and training in a union school.

Finally, I address myself to testimony submitted on December 9, 1975, by J. M. Calhoun, President of the Calhoun Marine Engineers' Beneficial Association School, to the extent of stating that his remarks, as far as they are intended to be applicable to Texas Maritime Academy, abound with inaccuracies and misstatements and obviously so to anyone familiar with Texas A&M University.

STATEMENT OF HARVEY STRICHARTZ, TECHNICAL DIRECTOR, AMERICAN RADIO ASSOCIATION, AFL-CIO, ON BEHALF OF ARA AND THE RADIO OFFICERS' UNION UTW, AFL-CIO

Mr. Chairman, thank you for the opportunity to make this statement for the consideration of this Subcommittee. It is filed on behalf of the American Radio Association, AFL-CIO and the Radio Officers' Union of the United Telegraph Workers, also an affiliate of the AFL-CIO. The members of ARA and ROU are licensed Radio Officers and Radio Electronics Officers serving aboard approximately 92% of the United States flag ocean-going merchant marine vessels. They are responsible for providing these ships with the radiocommunication capability and radionavigation facilities that enable these vessels to sail safely and efficiently on all the oceans of the world.

It should be noted that the skill and training of licensed Radio Officers are of a high order, and that Radio Electronics Officers are simply Radio Officers who have acquired even greater skill through additional training. Our members share with the other ship officers and crew members a deep and personal interest in the safe passage of ships and in their efficient operation. This is so because it is our own lives, in the first instance, that are at stake, where safety of the ships are concerned, and it is our livelihoods that are involved where the efficiency of the vessels is involved.

As a result of the requirement of a high level of skill for the operation of radiocommunication equipment and the technical maintenance of that equipment and of radio-electronic navigation apparatus by licensed Radio Officers and Radio Electronics Officers, both our Unions have a priority interest in maritime training, and hence in the Maritime Training Legislation before this Subcommittee.

First, we call the attention of the Subcommittee to the fact that none of our members have been trained, or are being trained by the U.S. Merchant Marine Academy or by the State Maritime Academies. All of our members have acquired their skill and training without any cost, direct or indirect, to the United States Government. When additional skills are required, our two Unions have cooperated with the Companies operating 92% of the U.S. flag merchant marine vessels with which we have Collective Bargaining Agreements, to operate joint training programs, known as the ARA TIME (ARA Technology Institute for Maritime Electronics) Program and the ROU ETP (Electronics Training Program.) The identical facilities are used jointly by the two programs on a proportionate-share basis. The monies for these training programs result from our two Unions having diverted a share of their collective bargaining "packages" for the purpose of training. (Had we not done so, these monies would have been available for direct benefits of some other character to our members, therefore, no additional cost has been involved.)

Having heard and analyzed much of the previous testimony on this legislation, it should be of interest to this Subcommittee to know we are not asking that there be any change of approach to training licensed Radio Officers and Radio Electronics Officers. As the technology has developed, as the equipment, techniques and practices have become more sophisticated and complex and have therefore required greater skill, our joint training programs have provided the additional upgrading training required to keep our members abreast of these developments. We believe we can continue to do so.

The Subcommittee may be interested in knowing that an additional examination by the Federal Communications Commission to obtain a Radar Endorsement (necessary for technical maintenance of ship radar equipment) is taken by all of our trainees before they are certified as licensed Radio Electronics Officers, and that 100% of the graduates of our REO Training Program have passed such FCC examination and hold such endorsements. The failure rate is zero.

On another subject, our two organizations do not, and never have required mandatory retirement for licensed Radio Officers. We are alarmed by the fact that testimony has been offered before this Subcommittee in support of a proposal to require mandatory retirement for licensed officers. In our view, this constitutes a retrograde attitude toward human beings who should have the right to participate in the productive work of society as long as they have both the ability to make substantial contributions to it, and the desire not to avail themselves of the pension programs which our organizations provide for the

membership. Our experience over the years has been that ability is not a function of age, but of many factors which go into the make-up of an individual: motivation, creativity, relative physical condition, etc. When a ship is in distress, a man aged 66 can alert other vessels and summon assistance from the ship, lifeboat or a raft, quite as well, and sometimes better than a younger man with lesser experience; similarly, when a vessel's vital radar equipment has broken down and is malfunctioning, the necessary maintenance and repair can be provided by an alert and creative and skilled intelligence of any age. We sincerely urge that the Subcommittee give this proposal for a mandatory retirement age short shrift, and that we never have to confront it again.

Further, we are opposed to the suggestion that has been made before the Subcommittee that the Government conduct regular physical examinations for all licensed officers. ARA and ROU members must undergo pre-employment physical examinations prior to assignment to vessels, and at intervals during their continuing employment aboard them. We also provide an annual comprehensive diagnostic physical examination for all our members. There is no need for the Government to conduct physical examinations for licensed Radio Officers or Radio Electronics Officers and we oppose any proposal to this effect.

Similarly, we oppose the provisions of Section 7 of H.R. 10413 which direct the Commerce Department and the United States Coast Guard to undertake "a thorough review of the laws, regulations and policies which pertain to the renewal of the licenses of Merchant Marine Officers to determine if existing renewal procedures provide for the adequate testing of officer's retention of basic skills."

This would appear to submit our members to requirements not currently made for doctors (not even heart or brain-surgeons), lawyers, (not even when serving as judges or legislators), or most other professionals that are analogous to their skills.

Our principal concern is the fact that such drag-net methods as might result, could have the effect of barring men who are completely capable, indeed of high skill, experience and training, from being able to continue to serve aboard vessels. This would not only be a gross injustice to men who might thus be barred but would adversely effect the safety and efficiency of vessels. Immediately there comes to mind in this connection the case of Leslie Philbrook, who was Radio Electronics Officer for years on the Hospital Ship HOPE, and in that capacity provided skilled maintenance and repair to the electronic hospital equipment of that vessel, in addition to its radiocommunication and radionavigation apparatus. When performing these services Leslie Philbrook had uncorrected vision of 20-200, tested without his eye-glasses, and would most probably have been barred from continuing service under this type of legislative proposal. We also are mindful of the many licensed Radio Officers and Radio Electronics Officers with one arm or one leg who performed their services during World War Two, the Korean War and Viet-Nam emergencies, etc. These men also might well be barred.

We urge that this proposal be rejected by the Subcommittee.

We are opposed to Section 6 of H.R. 10413 which directs the Coast Guard to maintain a list of licensed merchant marine officers for use "in the event of any national emergency." Such a list would certainly be ineffective for national emergencies of the Korean or Viet-Nam type; the needs of the U.S. Merchant Marine were met by emergency recruitment/training programs undertaken by our Unions jointly with our contract Companies. However, under this wording, "national emergency" could be deemed to be such national emergency as might be declared by the President in the event of a maritime strike. Our two Unions have been successful in negotiating renewals of their Collective Bargaining Agreements without recourse to strike for the past ten years and have no desire but to continue to keep the ships operating, if at all possible. None-the-less, we view Section 6 as both unnecessary and potentially anti-labor in nature.

Thank you for the opportunity to present this Statement. We hope that the information prove useful to the Subcommittee in its deliberations and urge that our recommendation with respect to this legislation and to the above mentioned proposals be acted on affirmatively. In making this request we are mindful of our responsibility to provide U.S. merchant marine vessels with adequate skilled and trained licensed Radio Officers and Radio Electronics Officers so that the U.S. Merchant Marine may fulfill its mission in world trade and as an arm of our national defense safely and efficiently.

AMERICAN INSTITUTE OF MERCHANT SHIPPING,
Washington, D.C., December 9, 1975.

Hon. THOMAS N. DOWNING,
*Chairman, Subcommittee on Merchant Marine, House Committee on Merchant
Marine and Fisheries, U.S. House of Representatives, Washington, D.C.*

DEAR MR. CHAIRMAN: The purpose of this letter is to provide you with the views of the Tanker Council on H.R. 10413 and identical bills to provide for a integrated system of education and training of officers for the U.S. Merchant Marine. The Council is an organization, consisting of the 23 members of the American Institute of Merchant Shipping (AIMS) that own and operate United States-flag tanker vessels. I should like to stress that the views herein should in no way be taken as the position of AIMS itself, or of any other organization existing within the AIMS structure.

The Council supports the principles of this legislation and the \$600 increase in annual per student grant used to defray expenses of those attending State maritime academies. Our support for the increase is tied to provisions in the bill designed to balance the supply of educated licensed officers with the need for them through flexible procedures governing utilization of all the various institutions which educate and train merchant marine officers.

While the legislation appears to recognize the need for flexibility in most respects, and we commend its sponsors for including those provisions, the implication in Section 2 that institutions other than the Federal and State academies should solely be relied upon to fulfill short-term emergency requirements is a move away from flexibility and should be deleted. In the event of an emergency, all available resources should be mobilized to train officers. The Federal and State academies could accelerate on-going programs and thus make an important contribution, as they have in the past.

The propriety of giving Federal support to educate individuals for sea-going careers when a sizeable percentage of graduates do not pursue those careers has been called into question during these hearings. However, the Committee should be aware that, for a significant number of qualified graduates, the question should be why they are not given an opportunity to go to sea. At the present time, graduates of certain union schools are given preference over Federal and State academy graduates for jobs controlled by those unions. We believe the record of these hearings should reflect the Committee's concern that all qualified institutions should have equal opportunity to place graduates as a matter of equity.

As to other provisions of the bill, we respectfully submit the following comments.

First, the provision requiring closer coordination between the Government and maritime training institutions in relating enrollment levels to industry personnel requirements. We support this as sound administrative policy while noting that projected employment levels for U.S. merchant marine officers have historically not been accurate. Consequently, it is suggested that this is another area requiring a degree of flexibility.

Second, the \$600 increase in subsistence payments to students at State academies. The \$600 level has been in effect since 1958 and the proposed upward adjustment to \$1,200 is clearly warranted by inflation alone. The student allowance, which amounts to \$50 per month, does not come close to defraying the special expenses associated with training for maritime service, such as the costs of equipment and uniforms. It is noteworthy that the State academy cadets, who pay their own tuition, spend summers on training ships and do not have the opportunity to earn the funds necessary for their education.

Third, greater utilization of the National Maritime Research Center. The provision for making the Center available to students from all institutions is an excellent one. In addition, we note that the resources and programs of the Center could be valuable in upgrading maritime officers' training.

Fourth, accurate listing of licensed merchant marine officers. We support in principle the proposal for maintaining a current roster of officers capable of serving in the event of a national emergency. However, recognition should be given to the administrative burden that would be imposed on the Coast Guard to list former officers who have not renewed their licenses. The roster should be as complete as possible with up-to-date information on current employment and areas of expertise.

Fifth, review of license renewal procedures. We strongly endorse the proposed review of the adequacy of laws, regulations and policies involving merchant

marine officer license renewals. Renewal of licenses should be conditional upon reasonable minimum standards of health, especially adequate eyesight and hearing. If existing procedures are inadequate, they should be reviewed and made responsive to the best interests of the officers, the industry and the country.

Sincerely,

GEORGE H. BLOHM,
Chairman, Tanker Council.

THE SEAFARERS INTERNATIONAL UNION
OF NORTH AMERICA—AFL-CIO,
Washington, D.C., January 14, 1976:

Hon. THOMAS N. DOWNING,

Chairman, Subcommittee on Merchant Marine, House Merchant Marine and Fisheries Committee, Rayburn House Office Building, Washington, D.C.

DEAR CHAIRMAN DOWNING: The Seafarers International Union of North America, AFL-CIO, wishes to submit its views on H.R. 1626 et al., a bill that would increase the subsistence payments for students at the state maritime academies. In considering the impact of this legislation on the U.S. maritime industry, we are mindful of a number of factors.

First, the U.S. merchant marine is in a weak economic condition because of the general decline in the amounts of cargoes being shipped. This had led in turn to the lay-up of large numbers of U.S.-flag vessels and the cancellation of many new ship orders. All of these problems have resulted in a growing surplus of maritime personnel, particularly of licensed officers.

The Seafarers Union feels strongly that an increase in the subsistence payments from \$600 to \$1200 would only serve to increase the present officer oversupply situation by encouraging the maritime academies to seek additional enrollments. Under the circumstances, it is not beneficial to the U.S. merchant marine to add to the problem of excess officer manpower and thus make it more difficult for present officers to find work.

Secondly, inasmuch as the issue of training standards at the academies has arisen at the hearings, we feel that perhaps the best course may be to defer action on H.R. 1626 et al until a fuller examination can be made of both the quality and the effectiveness of the various state maritime academy programs. We are informed that there is presently some disparity between the academic achievement of students at the various academies. In light of this, a comprehensive review of the academy programs may help to clarify whether or not a new approach to this situation is needed.

In summary, we feel that in view of the present oversupply of marine officers, which has been further accentuated by the industry's economic difficulties, an increase in the state maritime academy student subsistence payment is both unwarranted and would be a disruptive factor in maritime employment stability.

Rather than seeking ways to stimulate enrollment at the state maritime academies, such as increasing the Federal subsistence payment, we feel the U.S. merchant marine would be better served by a fuller examination of the issues surrounding this question.

The Seafarers International Union thus requests that any increase in the subsistence payments to state academies through H.R. 1626 be delayed until these important questions can be settled. We would also ask that this letter be made a part of the official record on H.R. 1626.

Sincerely,

PAUL HALL, *President.*

STATEMENT BY GEORGE B. RECTOR, RADM, USMS, DIRECTOR, GREAT LAKES MARITIME ACADEMY, NORTHWESTERN MICHIGAN COLLEGE, RELATING TO THE GREAT LAKES MARITIME ACADEMY POSITION STATEMENT ON H.R. 10413

INTRODUCTION—PURPOSE OF THE GREAT LAKES MARITIME ACADEMY

To serve the maritime industries manpower needs on the Great Lakes and connecting waterways by providing young people career opportunities for training as officers in the fresh water sailing industry and to provide quality education designated to meet the demands of current and future technology in an expanding maritime complex as it applies to the Great Lakes Maritime Academy.

BRIEF HISTORY OF THE GREAT LAKES MARITIME ACADEMY

Between the middle 1950's-1960's extensive dialogue and research went into the advisability of establishing a maritime academy to train officers for the Great Lakes and connecting waterways industry.

During this time span Federal authorities authorized establishment of a fresh water training institution. The Michigan legislature and the State Board of Education designated Northwestern Michigan College as the site for the Great Lakes Maritime Academy.

Prior to the establishment of the Great Lakes Maritime Academy there was no maritime academy designated to specifically train officers for fresh water sailing.

In 1969 the Great Lakes Maritime Academy began its operation with six students. During the ensuing six years the academy has had a proportionate growth to industry needs both in student enrollment and facilities.

To date there have been 41 graduates of which 80% are currently serving as officers on Great Lakes vessels.

UNIQUENESS

The Great Lakes Maritime Academy is the only maritime academy that operates a three year program. Our graduates receive an Associate Degree in Science (Maritime). We consider this an important fact that addresses the universal problem of other academy trained officers leaving their ship assignments for shoreside employment.

The Academy as a division of Northwestern Michigan College is committed to the community college concept of education and the cadet is directed toward the terminal program, the emphasis is placed upon the technical as opposed to the liberal arts approach.

The Academy is a division of Northwestern Michigan College where our cadets are a part of the Northwestern Michigan College student body. Cadets live in college dormitories or college apartments. We have de-emphasized the military posture existing at other academies. Our feeling is that this is inappropriate. Instead we operate in a disciplined environment that parallels the degree of discipline found aboard Great Lakes ships.

The Great Lakes shipping industry differs vastly from other segments of the maritime industry and therefore the mission at the Great Lakes Maritime Academy addresses itself to the special needs of the Great Lakes.

Following are some of the more pertinent unique characteristics:

Pilotage

The deck officers trained at the Great Lakes Maritime Academy are classified by the United States Coast Guard as First Class Pilots as opposed to graduates of other academies who are trained as Third Mates.

Bulk cargo handling

The great majority of Great Lakes cargo is bulk. This requires special training in loading procedures, equipment and stability considerations.

Foul weather characteristics

Storms on the Great Lakes create wave conditions different from any place else in the world. Due to this condition, the Great Lakes Maritime Academy has expanded both its theoretical and practical (shipboard experience) training to prepare cadets for these unique weather conditions.

Shiphandling

Shiphandling on the Great Lakes differs from open water sailing in many ways. Major among these are:

1. Frequency of loading and unloading
2. Congestion of waterways
3. Distribution of cargo on the Great Lakes necessitates mastery shiphandling techniques in rivers, canals and locks.

Icc conditions

The current demands of the steel industry have necessitated the extension of the navigation season which requires more in depth knowledge of ship construction and stability as regards piloting and shiphandling in icy waters.

Maneuvering

The engineering cadet must receive more in depth training in engine handling due to the extended periods of "check speed" operation.

Ballasting

Due to the nature of Great Lakes shipping "dead heading" is common. This requires special understanding of ship's construction and stability in ballasting when no cargo is aboard.

Maintenance

Traditionally engineers on the Great Lakes do a majority of equipment maintenance as opposed to contracting to shipyards. Because of this we place heavy emphasis on standard and emergency maintenance.

Nine months sea time

We believe that training aboard commercial vessels is superior to training aboard a training vessel. Nine months sea time is a requirement of our program while only six months aboard a training vessel is required for other state academies.

H.R. 10413, SECTION 3, MANDATED ENROLLMENTS

We, of the Great Lakes Maritime Academy, have no objection to mandated enrollments, providing the mandated numbers are consistent with Great Lakes industry needs based on documented statistics exclusively related to Great Lakes shipping industry.

As indicated in the introduction the Great Lakes Maritime Academy has consistently made every effort to train officers in direct proportion to the needs of the Great Lakes shipping industry. This has been accomplished by the input from the members of our Board of Visitors which is composed of labor (MEBA/-AMO and MM & P), shipping company representatives, (Lake Carriers Association), United States Coast Guard, Maritime Administration, an active captain and chief engineer, chairman of the Northwestern Michigan College Board of Trustees, the shipbuilding industry, and the Michigan State Board of Education.

The Great Lakes Maritime Academy's current cadet enrollment less our 40% attrition rate, will provide about 24 officers per year. This number is somewhat lower than the annual anticipated need (30) as set forth in *Deck and Engineers Officers in the U.S. Merchant Marine: Supply and Demand, 1974-1984*, published by the U.S. Department of Commerce, Maritime Administration, May, 1974, pg. 42. Our annual output of officers further documents our previous stated position of maintaining the balance between graduates and industry manpower needs.

H.R. 10413, SECTION 4

Obviously we support the increase in Cadet Subsistence payments from \$600 to \$1200 per year to offset the increased costs the cadet must bear due to inflation.

We oppose vehemently any proration of cadet subsistence grants that would reduce the number now assigned to the Great Lakes Maritime Academy. Further, we feel that this document contains sufficient information to substantiate the fact that the Great Lakes Maritime Academy is operating within the framework of our commitment to industry to produce only those numbers of officers necessary to meet their needs.

SUMMARY

Historically the Great Lakes industry has had only minimal success in attracting career officers from other state academies. This is due to the special characteristics and requirements of a Great Lakes officer as opposed to one who is ocean oriented.

We, therefore, as the primary source of academy trained officers for the Great Lakes industry do strongly seek your recognition that the Great Lakes Maritime Academy is necessarily unique in the maritime training field and ask that when H.R. 10413 comes before the full committee you will see fit to support our separate position.

Unfortunately we were the only state academy not visited by the Rooney Committee.

We extend and would encourage a visit from you or any of your staff to come to the Great Lakes Maritime Academy and see us in action.

Thank you for your consideration.

*Northwestern Michigan College, average maritime student budget,
first year student, 1975-76*

Tuition and fees.....	\$1,000
Room and board.....	1,431
Books and supplies.....	350
Personal expenses.....	400
Transportation expenses.....	350
Total	\$3,531

GREAT LAKES MARITIME ACADEMY

BOARD OF VISITORS

Mr. Eric J. Bernhardt, Program Manager for State Maritime Academies, U.S. Department of Commerce, Maritime Administration, Washington, D.C. 20235.

Captain John V. Caffrey, Deputy Chief, Office of Merchant Marine Safety, United States Coast Guard, Washington, D.C. 20591.

Captain John T. Duff, President, Local 47, Great Lakes & Rivers District, Master, Mates and Pilots, 2420 Terminal Tower, Cleveland, Ohio 44113.

Mr. Arthur J. Zuehlke, President, Bay Shipbuilding Corporation, Sturgeon Bay, Wisconsin 54235.

Vice Admiral Paul B. Trimble, USCG (Ret.), President, Lake Carriers Association, 1411 Rockefeller Building, Cleveland, Ohio 44113. Alternate: Scott H. Elder, General Counsel.

Mr. David Oberlin, Administrator, St. Lawrence Seaway Development Corp., Department of Transportation, 800 Independence Ave., Washington, D.C. 20590.

Captain William C. Bacon, Port Captain, Ann Arbor RR (Car Ferries), Frankfort, Mich. 49635.

Mr. John B. Woodward III, Department of Naval Architecture & Marine Engineering, University of Michigan, 445 W. Engineering Building, Ann Arbor, Mich. 48104.

Dr. John W. Porter, Superintendent, Michigan Department of Education, Lansing, Mich. 48902. Alternate: Dr. Robert L. Huxol.

Mr. Les Biederman, Chairman, Board of Trustees, NMC, 314 E. Front St., Traverse City, Mich. 49684.

Mr. Melvin H. Pelfrey, Vice President, Great Lakes MEBA/AMO, 925-27 Summit Street, Toledo, Ohio 43604.

Mr. Eli Rantannes, Chief Engineer, Bethlehem Steel Corp.

Captain Donald Erickson, Ford Motor Co.

OBSERVERS

Mr. John Horton, Cleveland Cliffs Steamship Co., 1460 Union Commerce Building, Cleveland, Ohio 44115.

Mr. George Ryan, Maritime Administrator, Great Lakes Region, Taylor Building, 666 Euclid Ave., Cleveland, Ohio 44113.

GUESTS

Dr. William J. Yankee; Dean Clovis B. Ferguson; and Admiral Willard J. Smith, USCG (Ret.).

STATE UNIVERSITY OF NEW YORK,
MARITIME COLLEGE,
Fort Schuyler, Bronx, N.Y., December 29, 1975.

HON. THOMAS N. DOWNING,

Chairman of the Subcommittee on Merchant Marine, U.S. House of Representatives, Longworth House Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: I would like to take this opportunity to rebut the statements Mr. Calhoun made before the Subcommittee of the House Merchant Marine and Fisheries Committee on December 9, 1975. I am the Chairman of the Ocean Engineering Department of the S.U.N.Y. Maritime College. In addition to my academic credentials, I am a licensed marine engineer and have been professionally involved with maritime education and industry for twelve years.

Mr. Calhoun states that the federal and state maritime schools have failed to provide adequate training for their students. This statement is totally absurd. All the schools, and in particular the S.U.N.Y. Maritime College, have strengthened their programs from the 18 month programs in effect during World War II to programs that are in excess of four academic years. Actually some are equivalent to five academic years although they are completed in four calendar years. In particular, the Maritime College's Marine Engineering program has obtained a level of technical competence that allowed full accreditation by the Engineers' Council for Professional Development (E.C.P.D.). A distinction which, together with the U.S.C.G. Third Assistant Engineer's License, recognizes that the graduates are fully capable of professional endeavors in all phases of marine engineering—all the way from the control console of a super tanker—to the shops of a shipyard—to the design groups of a company developing the power plants of the future. The graduates of programs like this are put through one of the most rigorous combined educational and training programs available to young Americans today. A program that not only prepares them for the marine field, in its broadest sense, but a program that has been enormously successful in placing graduates in their field of employment—the marine field. For more than ten years, all engineering graduates had at least one job offer by graduation. The only exception to this record was the class of 1975. Four students of the 1975 Engineering Class (47 graduates) were unable to find jobs at graduation time (they have since). As we all know, 1975 was a very dismal year for new entrants into the job market. Even though it was a very dismal year, all but seven of the initially employed graduates (three of the seven entered graduate school) entered the marine industry, including eleven who obtained sea-going employment. The last figure is of interest and should be dwelled upon. All eleven of these graduates obtained employment as Third Assistant Engineers on ocean-going vessels, but none was able to obtain employment on vessels contracted by the Marine Engineers' Beneficial Association, District I. The reason is clear, counter to Mr. Calhoun's denials, *the MEBA, District I has discriminatory hiring practices*. Practices that unquestionably favor graduates of the Calhoun MEBA School. All eleven graduates mentioned obtained employment with major oil companies and on BMO contracted vessels. If the MEBA hiring practices treated all candidates equally, the number of graduates going to sea would have been much higher. It should be noted that the major oil companies and the BMO all send representatives to the Maritime College campus to recruit engineers. Why doesn't the MEBA?

The question that should be asked is: "Where did all the other graduates go?" All but four entered or plan to enter the marine field after additional education. They entered other phases of the marine industry, phases where the U.S.C.G. license is a very important credential. It is unfortunate that graduates entering the ashore phase of the marine industry *cannot sail on their licenses* for a few years before they come ashore. It is unfortunate that the *MEBA's discriminatory hiring practices prevent these capable young men and women from gaining the experience that results from sailing on their licenses* for three, four, or five years. Not only do the shore-side phases of the marine industry suffer but so do the fleet owners and the unions. Both fleet owners and unions lose the availability of the most highly educated and capable young men and women who could operate the new merchant ships and properly utilize the most modern technology available. In order to operate modern, high-performance power plants in the most efficient manner, personnel with a high degree of technical and academic competence are necessary. No longer is it only necessary for an operator to turn valves or move control levels; it is necessary for him (or her) to interpret performance data, understand thermodynamic consequences of certain actions, as well as be able to understand and trouble-shoot sophisticated control systems. We should untie the hands of the operators, letting them use the *most competent personnel available* so that they do not have to base technical decisions on the fact that they do not have sufficient numbers of on-board technically competent people—no longer should they have to say "that equipment is too sophisticated for my crew". It is easily seen that this type of capability requires the type of education and training attainable at the S.U.N.Y. Maritime College—a degree of education and training that is accepted and respected by the Engineers' Council for Professional Development, The Society of Naval Architects and Marine Engineers, the Society of Marine Port Engineers, and basically, all ship owners. It seems nearly everyone but Mr. Calhoun!

In Mr. Calhoun's statement, he mentions that federal and state maritime school graduates who go to sea (in the MEBA's case if they were permitted) stay at sea for only a few years and then, some of them, accept employment

ashore. He implies that this is wrong and consequently the industry suffers. Actually, this is a very healthy situation. Young eager men and women enter the sea-going phase of the industry (and unions) bringing with them the wealth of knowledge and thinking processes they obtained in their formal education and apply it to ships, with enthusiasm. Concurrently, they are gaining valuable experience that comes only through prolonged exposure and maturity (note that during this time they also pay full union initiation fees and dues). At the end of a few years, many decide to "come ashore" and those who remain at sea have done so as a result of their own free choice—they have alternate attractive employment but *decide they want to continue sailing*—they are not trapped into sailing because of a lack of alternate employment. Let's concentrate on those who "come ashore" after a few years of sailing. Where do they go? An analysis will show that many of them go into marine related shore industries, such as design agents, shipyards, component manufacturers, service industries and port engineer positions, just to mention a few. Are they lost to the "marine industry"? Absolutely NO! In addition, they have come to the support part of the industry with a thorough first-hand knowledge of the sea-going phase of the industry. Inherently this turnover in the lower echelon allows a continual influx into the industry, thereby maintaining viability and preventing technical obsolescence.

In his testimony, Mr. Calhoun gives statistics on the engineering license examination results for 1974. This information, at least in part, is erroneous and misleading. Table 5 shows that S.U.N.Y. Maritime College students (class of 1975) had a 62.26% passing rate, a failure rate of 0.0% and a partial failure rate of 37.74% for both steam and motor. It implies that none of the partial failure students retook the examination which, in turn, implies that 37.74% of the 1975 Engineering graduates (May 1975) did not pass the license by graduate day. Totally false. By graduation, only one of the 53 candidates did not have a U.S.C.G. license in hand. That is a success rate of 98.3%. As a point of information, the graduate who had not passed the examination, recently retook it (December 1975) and we are awaiting the results. Considering that the Class of 1975 was the first Engineering class to take the new format examination, I don't think even Mr. Calhoun can state the results were anything but impressive.

Also in his testimony, Mr. Calhoun implied that faculty members at the Federal and state maritime schools were uninterested in the sea-going phase of the marine industry. This implication is totally absurd. Many faculty members of the S.U.N.Y. Maritime College Engineering Department are actively engaged in improving the operation of our merchant fleet. As an example, I am including a copy of my list of publications. It is interesting to note that on Page 16 of MEBA's publication *The Marine Engineer*, December 1975, there is an article on a study that I recently completed. The article is based on the first item listed on the attached publication list. If you or any members of the Committee would like copies of these publications, I would be very glad to send them. Mr. Calhoun also stated that new topics such as LNG are not being covered. This may be a new topic of Mr. Calhoun but it has been in the S.U.N.Y. Maritime College curriculum (in more than one course) since 1965!

In closing, I would like to suggest that members of the Committee ask Mr. Calhoun the following questions:

1. Do most of the non-state or federal maritime school graduates contribute to the marine industry, after terminating their sea-going careers—regardless of the duration?
2. What is going to happen to the industry when the MEBA Calhoun school becomes the only formal source of Marine Engineers in the United States? Will all ships be forced to contract to the MEBA?
3. Since the shipping companies pay for a candidate's education at the MEBA Calhoun school and since most of the ships under MEBA contract have operating subsidies or are in other ways government supported, what is the actual cost to the Federal government? It appears to us it is in excess of \$5,000.00 per MEBA school license candidate.
4. What is wrong with policies that require professionals to be periodically re-examined? I, for one, would like to know that my doctor is up-to-date on the most modern medical techniques.

Sincerely yours,

JOSÉ FEMENIA,
Professor and Chairman,
Ocean Engineering Department,

Enclosures.

PUBLICATIONS AND REPORTS

"Alternate Energy Sources for Marine Power Plants", presented to the Society of Marine Port Engineers, New York, N.Y., September 1975.

"Economic Comparison of Various Marine Power Plants", presented at the Webb Institute Spring Seminar, Marine Fuel Conservation, May 1975.

"Efficient Low-Power Operation of Steam Turbine Marine Power Plants", National Maritime Research Center, Kings Point New York, publication, NMRC-KP-140, January 1975.

"Economic Comparison of Various Marine Power Plants"—1973 Society of Naval Architects and Marine Engineers Transactions, November 1973.

"Combined Gas-Steam Turbine Marine Power Plants"—Webb Report to Maritime Administration, July 1972.

"Development of a Pollution Free Cargo Tank Cleaning System for use on Board Tankers"—New York State Sea Grant, December 1972.

"Cost of Ship Vibration Problems"—Webb Report to Maritime Administration, January 1972.

"Simulation of Propeller RPM and Rudder Angles"—Webb Report to Sperry, December 1971.

"Analysis of Available Power Plants"—Webb Report to Maritime Administration, July 1971.

"Improving U.S. Shipping Productivity" (One Chapter)—Webb Report to Maritime Administration, July 1970.

Review of "Local Temperature Variation of a Transportation Cooled Wall Due to Radiant Heating"—by J. E. Anderson, June 1969.

Pumps—Chapter of study notes for the Instrumentation and Deviation Training Course for ESSA.

Absorption Type Refrigeration Systems, June 1965.

[From the Marine Engineer, MEBA, December 1975]

HYDROGEN FUEL "FEASIBLE" FOR SHIPS

Merchant ships of the future may turn to hydrogen fuel rather than nuclear power, solar energy or other forms of energy, according to a study made by Jose Femina of the Center for Maritime Studies of the Webb Institute of Naval Architecture, of Glen Cove, N.Y.

The study made for the National Research Center, Kings Point, N.Y., examined a wide range of possible alternate sources for present oil-based fuels powering steam driven ships and marine diesel engines and came up with the conclusion that while nuclear power, solar energy, coal-slurries and even wind may have possibilities, "the one that deserves particular attention as a long-range prospect is the use of hydrazine," which is basically hydrogen, because it has the potential of providing the means to furnish power.

CHRISTMAS TREES HAWAII-BOUND

The year's first Christmas trees from the Pacific Northwest sailed for Hawaii from Seattle on November 13 aboard the Matson containership SS Californian. The vessel arrived in Honolulu on November 18 with around 20,000 trees in 20 refrigerated containers.

The bulk of Hawaii's Christmas trees later left Seattle aboard the SS Hawaiian on November 27. The 120,000 trees carried gave the vessel the traditional designation of Hawaii's "Christmas Tree Ship."

REBUTTAL OF STATEMENT MADE BY JESSE M. CALHOON, PRESIDENT NATIONAL MARINE ENGINEERS' BENEFICIAL ASSOCIATION, BEFORE SUBCOMMITTEE ON MERCHANT MARINE, HOUSE COMMITTEE ON MERCHANT MARINE AND FISHERIES ON H.R. 1626, H.R. 9864, H.R. 10413, AND H.R. 10500 BY THE UNITED STATES MARITIME SERVICE CADETS, JANUARY 2, 1976

Mr. Chairman and members of the subcommittee, we, the cadets of the United States Maritime Service, would like to take this opportunity to rebut the statements of Mr. Jesse M. Calhoon made before this Subcommittee of the House

Merchant Marine and Fisheries Committee on 9 December 1975 and request that it be made part of the permanent record.

As engineering students presently attending the state academies, we are in a position to know that certain of Mr. Calhoun's statements are inaccurate and made with limited knowledge of what we, as engineering students, are presently pursuing in our educational training. Mr. Calhoun even admits on the top of page 2 of his statement that he is making his statement based on limited data. Conclusions drawn from limited data can only be considered biased, inaccurate, unacceptable and empty "rhetoric".

We feel that Mr. Calhoun's concept of what a U.S.M.S. cadet is supposed to do upon graduation and why he receives his subsistence allowance from the Federal Government is wrong. Throughout his statement, he implies that federal assistance to U.S.M.S. cadets should be directly related to whether or not they all pursue a sea-going *career*. We do not see this as the reason for federal subsistence payments. The idea behind the federal subsistence allowance is to provide the U.S. Navy with personnel qualified in both Naval and Merchant Marine procedures. Such personnel are of considerable value in peacetime and even of more value in time of war.

They would be best equipped in coordinating joint Naval and Merchant Marine activities. After receiving our Naval Commission, we are required to be affiliated with the Naval Reserve for six (6) years, during which time we must take Navy correspondence courses. If a cadet "ships out", his reserve commitment is fulfilled. However, if a cadet finds employment ashore, his reserve commitments require him to serve with the Navy for thirty (30) consecutive days for three (3) years, with loss of his company's salary during that time. While with the Navy he, of course, will receive ensign's pay. As for our education, U.S.M.S. cadets not only receive more than adequate shipboard training, but also obtain skill in exercising leadership responsibilities as a result of our regimental life. We receive courses in Naval Operations which fully qualify a graduate in the duties of Naval and Merchant Marine Officers. Midshipmen at the Naval Academy receive 50% of active ensigns' pay, free tuition, and free room and board. In return, they are required to give *five* (5) years of active service in the Navy, not a *career* in the Navy. Likewise, NROTC midshipmen receive one hundred dollars (\$100.00) a month in addition to money for books, uniforms and tuition. In return, they are required to give *four* (4) years of service to the Navy, not a *career* in the Navy. Since 1958, the amount of federal funds received by ROTC as the Naval Academy midshipmen has increased with inflation without an increase in commitment to the Navy. Hence, what we request is equitable treatment. Therefore, we challenge Mr. Calhoun's MEBA schools to produce a current graduate who will even approach a U.S.M.S. cadet's knowledge in leadership responsibilities and Naval Operations in time of war or national emergency.

On page 2 of his statement, Mr. Calhoun states that "increased academy funding will only encourage their expansion and worsen the already dismal job picture". This statement is fallacious. Again, Mr. Calhoun is not stating the facts. The facts are, that the State Academies are almost filled to capacity as it is. Their number of students are limited by the size of their physical plant. Hence, increasing the subsidy will not draw more students, rather it will help offset the costs of uniforms, books, room and board. Also, the academies are regulated by the government in the number of allowable subsidized cadets. Many cadets are also non-subsidized due to foreign citizenship and physical hindrances.

On another subject, Mr. Calhoun writes on pages 6 and 7 of his statement that the State Maritime Academies since becoming four year accredited colleges, "the emphasis was placed more and more on liberal arts courses at the expense of engineering and nautical science courses". This is totally absurd as well as written with a definite lack of "data". A look at the curriculum of a marine engineering student will indicate a well balanced theoretical and technical background. Using the S.U.N.Y. Maritime College program as an example, it can be seen that the cadet will graduate with 183 credits. This curriculum is broken down as follows:

- (a) 124 credits of science and engineering background.
- (b) 18 credits of Humanities.
- (c) 15 credits of Naval Science.
- (d) 6 credits of Physical Education.

The 15 credits of Naval Science, required by the Navy for our Naval Reserve Commission, include history, Naval Operations and Management. The 18 credits.

¹ See Appendix A.

of Humanities are required by the Engineers' Council for Professional Development (E.C.P.D.) which is regarded as the highest accreditation an engineering college can achieve. The 124 credits of science and engineering courses are what give the Maritime College cadets and other Maritime Academies' cadets their competence as licensed officers and engineers in the Maritime Industry. As can be seen from Appendix A, the courses taken cover the theory of basic engineering concepts and elaborate on the technical problems and ideas associated with the design and control of power plants, ships' support systems, and various other marine related engineering designs.

Mr. Calhoun states on page 12 of his statement "that the academies are not improving or expanding their programs to meet the needs of advanced technological ships such as the LNG tankers, and that his school has already graduated 60 such qualified officers". A graduate of the Maritime Academies with an engineering degree does not need to have "special" training in the operation of LNG tankers. With his course background in the actual design and operation of refrigeration plants, pressure vessels and related support machinery, the engineer from the academies is far better qualified to operate an LNG tanker than a licensed officer with an inadequate theoretical and design knowledge of "why" he is turning a particular valve. Now we ask you; if you were to hire an engineer to operate an LNG tanker or any other type of ship, who would you hire? Would you hire the MEBA licensed officer or the Marine Engineer with a degree and federal license who can not only operate the ship but can also design one, hence being better able to effect repairs in case of machinery breakdown?

The Maritime Academy cadets' contribution to the marine industry as a whole is unparalleled. Cadets' multi-faceted training includes leadership training through administration of a Regimental Organization and the pursuance of licensure and baccalaureate degree.

On page 7 of his statement, Mr. Calhoun's rhetoric becomes extremely lucid. His statement that "... (academy) instructors deprecate sea-going as a career and promote on-shore jobs as having more "status" is contrived. How is he so knowledgeable in relation to what academy professors say? On the same page, he says that "... emphasis is on military discipline with its snappy uniforms and well polished shoes". We find it difficult to believe that curricula at a college would receive accreditation and approval by E.C.P.D. if the "emphasis" were on discipline and appearance! The academies merely try to instill in the cadet a sense of self discipline and pride. These qualities can only serve as attributes to the growth of the U.S. Maritime Industry and the nation as a whole. Does Mr. Calhoun wish to condemn such qualities in U.S. citizens?

Further, he implies on page 7 that if trouble arises at sea on board ship, that our military training will detract from our innovative abilities to correct machinery malfunctions, since all we are taught is how to "follow orders". If this were true, then the entire U.S. Armed Forces would be in trouble. Who would be more qualified to solve a system malfunction than one who is educated in actual system design as we are? The Regimental Organizations and military discipline at the academies serve to train cadets in leadership techniques needed at sea in the Merchant Marine where a Third Assistant Engineer is placed in charge of oilers and wipers. Can Mr. Calhoun claim such training at his schools?

On page 7, Mr. Calhoun states, "Getting up to your elbows in *grease* and *dirt* does not fit in with this military style image". This statement is obviously made with a complete lack of knowledge of military life in general. Since when do Marines and Army men in the field or Navy men on board ships stay clean?

The fact that our training ships are older than the 25 years life expectancy only support our case. Being that these ships are older than the average commercial vessel, the repair work required to maintain these vessels increases. Hence, the cadets, being called upon to aid in the repair of various ships' components, are learning more about ships' systems through "hands-on" experience. What can have more "*grease* and *dirt*" than a 25-30 year old ship? Therefore, the fact that these ships are old only adds to our overall shipboard education rather than detract from it. It causes a greater involvement in plant operation and control since there is less automation. This allows U.S.M.S. cadets to learn the all important fundamentals more thoroughly. Shoreside laboratories and "mock-ups" insure the learning of contemporary automation. More importantly, by the State Academies and U.S.M.S. cadets maintaining these former troopships in an operating capacity, we are performing a service for the overall defense of the United States in case of national emergency.

Continuing with the subject of our education, Mr. Calhoon said in his statement that Maritime Academy cadets have no opportunity to learn the new technology, as related to the newly automated ships. This is another of the many absurdities of his statement. We not only take many mathematical courses relating to the stability of such ships' systems but we take courses directly connected to the *design* of these control systems. We are required to run various machinery with modern control systems and to get first hand experience with such systems in our engineering laboratories. Among some of the equipment that we use are modern boilers, gas turbines, gasoline and diesel engines, a nuclear reactor, a reactor simulator with its various highly technical control systems and a new automated engine room console in which the cadet reacts to various engine room situations that are introduced by the instructor. Just for the record, most of our instructors have shipped on their licenses and many have advanced beyond their 2nd Assistant Engineer's License.

As to the Maritime Academies asking for time to adjust to the change in license examination policy, we can see nothing wrong with this, especially since MEBA complained about the old type exam being detrimental to their percentage of passing. Well, the time of waiting for exam results to improve is over. For the class of 1976 using the S.U.N.Y. Maritime College as an example, all but two cadets who took their engineering license exams have passed as of this date. Looking at the deck license exams of December 1975, 72% passed completely, 24% failed in only one area and only one person failed the exam. A large part of the failure rate is due to an influx of foreign students (starting in 1971) who have a language problem taking the license exam and then failing. Most of these foreign students were engineers. This explains the poor exam results starting in 1974 when these foreign students began to take the exam.

The MEBA school in Toledo, Ohio also had difficulties this past year with exam results, considering that Mr. Calhoon had said the new type exam would be in the school's favor. The facts are that two students partially passed the exam and that 26 failed.²

On page 8 of his statement, Mr. Calhoon says that his students are required by the Coast Guard to have 365 days of sea time on commercial vessels, whereas cadets at the State Academies are required to have six (6) months of shipboard experience aboard each school's training vessel. Obviously, the U.S. Coast Guard has found that the six months of shipboard experience by U.S.M.C. cadets on their training ships is at least equivalent to the 12 months of training at sea that MEBA school students obtain aboard commercial vessels. Thus, is it not coincidental that the MEBA union requires 365 days of sea experience before a Third Assistant Engineer is eligible for Class 2 MEBA membership? We feel this requirement is an indirect way in which the MEBA union discriminates against academy graduates. This requirement for Class 2 membership prohibits academy graduates from obtaining sea-going employment with MEBA contracted vessels which constitutes a large majority of the U.S. flag fleet. Why does MEBA see fit to make such a requirement whereas the oil corporations and B.M.O. feel that the six months of training on board the training vessels with a degree is more than sufficient for employment? Why does MEBA require 365 days at sea? Why not 400 days? Could it be that if it were 400 days, his MEBA school graduates would be unable to obtain Class 2 MEBA membership as we are? Thus, when Admiral Kinney brought light upon these discriminatory union practices, Mr. Calhoon called it: "... a clear anti-union bias which has served only to weaken our Merchant Marine". We believe the Admiral was more anti-discrimination than anti-union. Hence, when fewer academy graduates pursue a sea-going career, the fact that the very union which condemns this is the one who limits these graduates' options seems hypocritical.

In Mr. Calhoon's statement on page 10, he says that "... just over 5% of those graduates who do go to sea in the Merchant Marine stay in the career for more than five years". Think about that statement for a moment. Now ask yourself what is wrong with those facts. It simply means that those men were offered shoreside employment and the statistics show that most of those men are working in Maritime oriented fields. Many of the companies that employ Maritime Academy graduates encourage them to ship for a few years during which time they will gain practical knowledge. This practical knowledge can be utilized while working ashore to improve the company, its ships and other areas of Maritime interest. By continually rotating these officers, there is a steady amount of vacant positions to be filled by the new graduates. This allows for a more youthful and vigilant group of Merchant Marine Officers.

² From *Journal of Commerce* dated 4 December 1975.

A graduate working ashore is still helping the Maritime Industry in the design, construction and maintenance of the fleet as well as other vital maritime related fields. These graduates are designing the new ships of tomorrow. They are not just operators who, when away from the engine room, are ineffective due to lack of knowledge. If a graduate does not acquire employment aboard an American Flag vessel because he can't ship on 80% or more of American Flag Vessels due to discriminatory union practices, MEBA shouldn't criticize him for seeking shoreside employment. We can see no way that shoreside employment hinders the U.S. Merchant Marine. It can only help, since these graduates are among the future engineering minds of America. These graduates must still fulfill their obligation to the U.S. Naval Reserve yearly and will be the ones to man the ships in case of national emergency in the future, regardless of Mr. Calhoun's empty criticism of our 'treason'.

On page 14, Mr. Calhoun contends that the Maritime Administration attempted to contact academy graduates in order to get them to return to sea during the conflict in Vietnam and that the response was inadequate. This statement is also inaccurate. The Maritime Administration merely sent out cards requesting data on the current occupation of the Academy graduates.

On the bottom of page 14, Mr. Calhoun states "What other program in this country uses \$13.7 million in federal money and seven government run schools to train 3500 people for largely non-existent jobs?" We challenge the veracity of this statement entirely! First, a large portion of the \$13.7 million is utilized for the maintenance of six training ships. Only \$1,080,000 goes for actual State Academy cadet subsistence payments. These training ship must be maintained for national defense reasons anyway. In fact, according to the Congressional Ad Hoc Committee report, 72% of MEBA school funding comes from, indirectly, federal funds. We ask, who is getting a much greater share of federal funding?

The figure of 3500 cadets used by Mr. Calhoun is misleading. Only about 500 to 550 cadets graduate from the academies combined each year. Hence, of the 3500 being trained under a four year program, many do not survive the rigors imposed by the State and Federal Academies' multi-faceted training programs, i.e. licensure, degree and commission. We also wish to question Mr. Calhoun's figure of 6484 available sea-going jobs on U.S. flag vessels. Is he including Military Sealift Command, Army Corps of Engineers or research vessels? Hence, 500 graduates will be looking for 6484+ sea-going jobs each year, not 3500 as implied. But if, as mentioned, MEBA's membership practices remain status-quo, this number of available sea-going jobs to academy graduates decreases considerably.

Mr. Calhoun appears to be contradicting himself when he first challenges on pages 4 and 5 of his statement the MARAD predictions of increased shipping and then on the other hand mentions on page 12 the growing need for LNG tankers to meet the nation's energy needs. With the upcoming opening of the Alaska pipeline, there will be a large need for tankers to transport oil from southern Alaska to the west and east coast of the U.S. Also, it is no secret that the U.S. is expecting severe natural gas shortages in the near future. This will require increased LNG shipping. Thus, we fail to see Mr. Calhoun's contention of largely "non-existent jobs" in the Merchant Marine. He appears to want to claim the job market for his school's students only.

As to the idea of re-exams for licensed officers and periodic physicals, we as Maritime Academy Cadets think that this is an excellent way to maintain a healthy and mentally astute group of men to operate our American Flag Ships. We don't seek this to give us more jobs because it wouldn't really help us due to MEBA's discriminatory practices. If the MEBA school thinks that they have done such a good job in training their officers and have a good physical examination program for their union members, then they should not worry about these physical and mental examinations. Besides, government administered physical exams would save MEBA the cost of these physicals. The Maritime Academy graduates know they have the training and knowledge necessary to pass these license exams at any time. If licensed seamen are overly concerned with failing these exams, they should not be responsible for the lives of the crew, nor the operation of a multimillion dollar vessel.

On page 18 of his statement, Mr. Calhoun mentioned that present regulations are already too much for his seamen to cope with. We disagree with this. Most of these regulations are for the good of the seamen and were implemented because the seamen fought for them.

Hence, with the growing needs of the nation in regard to energy development and processing as it relates to the U.S. Maritime Industry in the design, construction, operation and security of its merchant fleet, we feel that the most

qualified licensed officers with degrees, leadership, pride, self discipline and decision making qualities will be needed if the U.S. is to lead the world. It is for the required reserve commissioning time and federal training ship maintenance work that we perform that we substantiate the basis for subsistence payments to U.S.M.S. cadets to defray costs of books, uniforms, room and board. It is because of obvious cost increases since 1958 that we support the legislation increasing subsistence payments from \$600.00 per year to \$1200.00 per year.

Thank you, Mr. Chairman and Members of the Committee, for this opportunity by the U.S.M.S. cadets to rebut the statement of Mr. Jesse M. Calhoun made before the subcommittee on 9 December 1975.

APPENDIX A

ENGINEERING CURRICULUM

Courses Common to All Engineering Programs During First 2 Years

FOURTH CLASS YEAR (FRESHMAN)

<i>Fall semester</i>	<i>Credits</i>	<i>Spring semester</i>	<i>Credits</i>
Eng. 101, Eng. Comp.-----	3	Eng. 102, Hum. I.-----	3
Math. 101, Calc. I.-----	4	Math. 102, Calc. II.-----	3
Phys. 131, Engrg. Phys. I.-----	3	Phys. 132, Engrg. Phys. II.-----	3
Engr. 141, Engrg. Orient.-----	3	Chem. 108, Chem. I.-----	3
Comp. Sci. 122, Computer Sci. I.-----	2	Engr. 513, Ships Syst. I.-----	2
Engr. 503, Mfg. Proc. I.-----	1	Engr. 504, Mfg. Proc. II.-----	1
Phys. Ed. 101.-----	1	Phys. Ed. 102.-----	1
Total -----	17	Total -----	16

THIRD CLASS YEAR (SOPHOMORE)

<i>Summer sea semester</i>	<i>Credits</i>
Engineering 502, Summer Sea Term I—Operations I.-----	3
Physical Education 401, Hygiene, First Aid and Ship's Sanitation.-----	1
<i>Fall semester</i>	<i>Credits</i>
Chem. 209, Chem. II.-----	3
Math. 201, Calc. III.-----	3
Phys. 231, Engrg. Phys. III.-----	3
Eng. 210, Hum. II.-----	3
Engr. 514, Ships Syst. II.-----	4
Phys. Ed. 201.-----	1
Total -----	17
<i>Spring semester</i>	<i>Credits</i>
Lit. Option.-----	3
Math. 202, Diff. Equat.-----	3
Phys. 232, Engrg. Phys. IV.-----	3
Engr. 241, Sol. Mech. I.-----	4
Engr. 252, Trans. Proc. I.-----	4
Phys. Ed. 202.-----	1
Total -----	18

SECOND CLASS YEAR (JUNIOR)

<i>Summer sea semester</i>	<i>Credits</i>
Engineering 507, Summer Sea Term II—Operations II.-----	4

The above two calendar years comprise a core of studies that is common to all Engineering concentrations and totals 76 credits.

Marine Engineering Concentration

SECOND CLASS YEAR (JUNIOR)

<i>Fall semester</i>	<i>Credits</i>	<i>Spring semester</i>	<i>Credits</i>
Engr. 251, Sol. Mech. II.-----	3	Hum. or Soc. Sci. Elec.-----	3
Engr. 251L, Sol. Mech. Lab.-----	1	Engr. 353, Engrg. Anal. II.-----	3
Engr. 343, Engrg. Anal. I.-----	3	Engr. 352, Trans. Proc. III.-----	4
Engr. 301, Nav. Arch.-----	4	Engr. 391, Elec. Engrg. II.-----	3
Engr. 342, Trans. Proc. II.-----	4	Engr. 391L, Elec. Engrg. II Lab.-----	1
Engr. Elec. Engrg. I.-----	3	Engr. 515, Ships. Syst. III.-----	3
Engr. 381L, Elec. Engrg. I Lab.-----	1	Nav. Sci. 302, Navig.-----	3
Phys. Ed. Option.-----	½	Phys. Ed. Option.-----	½
Total -----	19½	Total -----	20½

FIRST CLASS YEAR (SENIOR)

<i>Summer sea semester</i>		<i>Credits</i>	
Engineering 511, Summer Sea Term III—Operations III-----		5	
Engineering 512, License Seminar-----		3	
<i>Full semester</i>	<i>Credits</i>	<i>Spring semester</i>	<i>Credits</i>
Hist. 105, Amer. Civ. I-----	3	Hist. 106, Amer. Civ. II-----	3
Engr. 441, Design I-----	4	Engr. 451, Design II-----	4
Engr. 452, Controls-----	3	Engr. 453, Nuc. & Mod. Conc-----	3
Engr. 352, Trans. Proc. III-----	1	Engr. 442, Engr. Eco-----	2
Engr. Elect-----	3	Engr./Sci. Elective-----	3
Hum. or Soc. Sci. Elec-----	3	Nav. Sci. 401, Nav. Oper-----	3
Nav. Sci. 402, Prins. of Nav. Org. & Mgt-----	3	Phys. Ed. Option-----	1½
Phys. Ed. Option-----	½		
Total -----	20½	Total -----	18½

Total for Marine Engineering Concentration : 163 credits.
Degree : Bachelor of Engineering.

MARINE ENGINEERING COURSES

ENGINEERING 141—ORIENTATION

3 class hours, 3 credits

The profession of engineering and role of the engineer in the community and in society. Ships and shipbuilding nomenclature and description of ship structures. Marine power plants—steam, diesel, gas turbine, nuclear and advanced propulsion concepts. Development of graphical presentation techniques.

ENGINEERING 241—SOLID MECHANICS I

4 class hours, 4 credits

Statics and dynamics of the particle and rigid body, using vector notation. Three dimensional force systems, center of gravity, static and kinetic friction, energy methods, and moment of inertia. Kinematics of rectilinear, plane and curvilinear motion. Kinetics of motion, using the principles of momentum, impulse and energy.

Prerequisites : Physics 132, Mathematics 201.

Corequisite : Mathematics 202.

ENGINEERING 251—SOLID MECHANICS

3 class hours, 3 credits

Material stress-strain relationships under axial, biaxial, torsional and flexural loadings. Principal stress analysis. Statically indeterminate flexural stresses and deflections by integration, superposition and energy methods. Combined static modes of loading, dynamic loading and column stresses.

Prerequisites : Engineering 241, Mathematics 202.

ENGINEERING 251L—SOLID MECHANICS LABORATORY

2 laboratory hours, 1 credit

Materials testing techniques; tension, torsion, flexure, fatigue and impact tests on structural materials. Engineering reports of tests required. Analysis of data is emphasized. Term project.

Prerequisite : Engineering 241.

Corequisite : Engineering 251.

ENGINEERING 252—TRANSPORT PROCESSES I

4 class hours, 4 credits

Definitions and properties. Fluid statics. System and control volume concepts related to continuity, first and second laws of thermodynamics, and the momentum equations. Dimensional analysis. Boundary layer concepts and viscous effects.

Prerequisites : Physics 131, Mathematics 201.

ENGINEERING 342—TRANSPORT PROCESSES II

4 class hours, 4 credits

Availability. Power and refrigeration cycles. Compressible flow. Mixtures and solutions in non-reactive and reactive systems. Phase and chemical equilibrium. Prerequisite: Engineering 252.

ENGINEERING 343—ENGINEERING ANALYSIS I

2 class hours, 2 laboratory hours, 3 credits

Introduction to mathematical and physical modeling of engineering differential systems. Analysis leading to solution of ordinary differential equations by analytical and numerical techniques. Graph theory and physical interpretation of solutions. Laboratory: Use of analog and digital computer facilities. Prerequisite: Mathematics 202.

ENGINEERING 352—TRANSPORT PROCESSES III

3 class hours, 3 credits

Steady and unsteady state conduction heat transfer in one, two and three dimensions. Heat transfer by thermal radiation, convection, and change of phase. Heat exchanger design.

Prerequisite: Engineering 342, Mathematics 202.

ENGINEERING 352L—TRANSPORT PROCESSES LABORATORY

2 laboratory hours, 1 credit

Principles of transport processes and fundamental laboratory techniques demonstrated through formal laboratory experiments and lectures. Experiments include steam turbine, diesel engine, gas turbine; conduction, convection and radiation heat transfer; pumps, supersonic wind tunnel and flow devices.

Prerequisite: Engineering 352.

ENGINEERING 353—ENGINEERING ANALYSIS II

2 class hours, 2 laboratory hours, 3 credits

Development of mathematical models for multidimensional physical systems. Solution of partial differential equations by application of separation of variables, and numerical techniques. Introduction to probability and random processes. Laboratory: Projects utilizing the basic elements of analysis and synthesis in the solution of engineering problems.

Prerequisite: Engineering 343.

ENGINEERING 441—DESIGN I

3 class hours, 2 laboratory hours; 4 credits

Interrelationship between naval architectural and marine engineering design. Diesel, steam, gas turbine, and nuclear ship propulsion system design, including thermal, mechanical and electrical considerations of system components. Laboratory study includes design, testing and projects associated with ship design and the ocean as an environment.

Prerequisites: Engineering 251, Engineering 352.

ENGINEERING 442—ENGINEERING ECONOMICS

2 class hours, 2 credits

The principles and techniques for making decisions about the acquisition and replacement of capital goods. Economic analysis for decision making. Interest and annuity relationships. Effects of uncertainty. Product and operating costs. Term projects.

ENGINEERING 451—DESIGN II

3 class hours, 2 laboratory hours; 4 credits

Continuation of Engineering 441 (Design I). Course description included under Engineering 441.

Prerequisite: Engineering 441.

ENGINEERING 452—CONTROLS

2 class hours, 2 laboratory hours, 3 credits

Introduction to various control criteria and methods of control. Control system analysis including methods of Nyquist, root locus, Bode diagrams, etc. Design applications including Fluidics, servo-mechanisms, temperature control and others.

Prerequisite: Engineering 353.

ENGINEERING 453—NUCLEAR AND MODERN CONCEPTS

3 class hours, 3 credits

Thermal and mechanical engineering problems of nuclear apparatus. Different types of reactors are studied and analyzed. Applications of reactors to the marine industry.

Prerequisite: Physics 232.

ENGINEERING 454E—VIBRATIONS

3 class hours, 3 credits

Theory of mechanical vibrations. Natural frequencies, harmonic analysis and multiple degrees of freedom systems. Special study of propeller shafting.

Prerequisite: Engineering 251.

ENGINEERING 454LE—VIBRATIONS LABORATORY

2 laboratory hours, 1 credit

Laboratory studies of vibrator systems. Digital and analog computer solutions.

Prerequisite: Engineering 251.

Corequisite: Engineering 454.

ENGINEER 459E—GAS DYNAMICS

3 class hours, 3 credits

Basic equations. Wave propagation. Isentropic flow. Normal and oblique shock. Prandtl-Meyer flow. Flow with friction. Flow with heat transfer. Application of theory.

Prerequisite: Engineering 342.

ENGINEERING 493E—INSTRUMENTATION

3 class hours, 3 credits

Statistical study of instrument systems. Transduction and transducer principles. Application in areas of oceanography, meteorology, engineering, biology, medicine. Dynamic response of instrument systems.

Prerequisite: Mathematics 202.

ENGINEERING 600E—SPECIAL PROBLEMS IN ENGINEERING

1, 2, 3 or 4 credits per term

Theoretical and/or experimental investigation of special problems in Engineering. The course will be project oriented.

ENGINEERING 652E—ADVANCED MARINE POWER PLANTS

3 class hours, 3 credits

Study of selected power systems presently under construction or under consideration for marine structures and vehicles or central power generating stations. Current and projected technical, environmental, and economic factors, and changing energy needs are evaluated to determine how they influence the selection of a power system to meet specific applications ashore or afloat. Equipment construction and layout, auxiliary systems, fuel requirements, power distribution, and other factors associated with the design.

Prerequisite: Engineering 251 and Engineering 342.

ENGINEERING 502—SUMMER SEA TERM I—OPERATION I

3 credits

Understanding of the ship's organization. Interrelationship of the components of an operating engine room. Safety of person and ship. Watchstanding, maintenance and repair, and lectures. Responsibility is delegated on the basis of experience and demonstrated ability.

Prerequisite: Engineering 141 or Engineering 513.

ENGINEERING 503—MANUFACTURING PROCESSES I

4 laboratory hours, 1 credit

Fundamentals of metal cutting, measuring systems, hand tools and machine tools with major emphasis on basic engine lathe operation.

ENGINEERING 504—MANUFACTURING PROCESSES II

4 laboratory hours, 1 credit

Continuation of Manufacturing Processes I with emphasis on advanced lathe work, milling machine operation, precision grinding, metal spraying, heat treating of metals, arc welding, and oxy-acetylene welding.

Prerequisite: Engineering 503.

ENGINEERING 507—SUMMER SEA TERM II—OPERATIONS II

4 credits

Areas of responsibility and depth of knowledge are increased in the over-all operations of the vessel under the supervision of the Chief Engineer and the Senior Engineering Training Officer. Safety of person and ship is emphasized.

Prerequisite: Engineering 502.

ENGINEERING 511—SUMMER SEA TERM III—OPERATIONS III

5 credits

Operational responsibility by the student engineer of all phases of ship work under the supervision of the Chief Engineer and Senior Engineering Training Officer. Safety of person and ship is emphasized. Each student must take and pass intensive oral and written examinations.

Prerequisites: Engineering 141, 502, 503, 504, 507, 513, 514, and 515.

Corequisite: Engineering 512.

ENGINEERING 512—SUMMER SEA TERM III—SEMINAR

3 credits

Lectures, discussions, and problems dealing with subjects required by U.S. Coast Guard for federal licensure as an officer in the American Merchant Marine.

Corequisite: Engineering 511.

In order to receive a permanent final grade in Engineering 512 a student must have successfully completed Engineering 511 and 512. He must have successfully completed 511 and obtained the cumulative average of 70% or better for the three summer terms 502, 507, and 511 before the permanent final grade will be issued for 512.

ENGINEERING 513—SHIPS SYSTEMS I

1 class hour, 2 laboratory hours, 2 credits

Theory, characteristics, historical development and classification of marine steam generators. Study of steam generator construction specifications as indicated in the U.S. Coast Guard Marine Engineering Regulations. Principles of combustion and water conditioning. Correct procedures in operation and maintenance.

ENGINEERING 514—SHIPS SYSTEMS II

3 class hours, 2 laboratory hours, 4 credits

Theory, construction and operation of ship board and auxiliary components and systems including refrigeration, A.C. and D.C. electricity, steering engines, pumps, heat exchangers, shafting, etc.

Corequisite: Physics 231.

ENGINEERING 515—SHIPS SYSTEMS III

3 class hours, 2 laboratory hours, 4 credits

Theory, construction, and operation of marine propulsion plant prime movers including diesel engines, steam reciprocating engines, steam turbines and gas turbines.

Prerequisite: Engineering 252.

[Whereupon, at 3:45 p.m., the hearing adjourned.]

○